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U. S. DEPARTMENT OF AGRICULTURE

OFFICE OF EXPERIMENT STATIONS

A. W. HARRIS, DIRECTOR

EXPERIMENT STATION BULLETIN No. 11

A COMPILATION OF ANALYSES

OF

AMERICAN FEEDING STUFFS

BY

E. H. JENKINS, Ph. D.

AND

A. L. WINTON, Ph. B.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE

WASHINGTON

GOVERNMENT PRINTING OFFICE

1892

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., October 15, 1891.

SIR: I have the honor to transmit herewith for publication a compilation of results of analyses of American feeding stuffs, which has been prepared by E. H. Jenkins, Ph. D., vice director of the Connecticut Agricultural Experiment Station, and A. L. Winton, Ph. B., chemist. The usefulness of this compilation requires no explanation.

Respectfully,

A. W. HARRIS,
Director.

Hon. J. M. RUSK,
Secretary of Agriculture.

ANALYSES OF AMERICAN FEEDING STUFFS.

INTRODUCTORY NOTE.

The following compilation is intended to include all analyses of American feeding stuffs which were accessible to the compilers at the time the work was done, with the exception of those which were so incomplete or so obviously erroneous as to leave no doubt about the propriety of excluding them.

The compilation was designed to include all analyses which were published before September 1, 1890. It was not possible to do this, as the latest publications of some of the stations were, for various reasons, not accessible when needed. In the following list is given the name of each station and the date or number of the latest issue of report and bulletin examined by the compilers.

Station.		Report for the year.	Bulletin number.
Alabama	Canebrake Station	1888	8
	College Station	1889	17
Arizona			
Arkansas		1889	12
California		1887	87
Colorado		1889	11
Connecticut	State Station, Middletown	All	All
	State Station, New Haven	1889	105
	Storrs Station	1889	5
Dolaware		1889	6
Florida			10
Georgia		1889	8
Illinois		1889	11
Indiana		1888	32
Iowa		1888	10
Kansas		1888	11
Kentucky			30
Louisiana	Sugar Station	1889	28
	State Station	1889	26
	North Louisiana Station	1889	27
Maine		1889*a*	26
Maryland		1888	10
Massachusetts	State Station	1889	37
	Hatch Station	1889	9
Michigan		1889	6
Minnesota		1888	12
Mississippi		1889	12
Missouri			12
Nebraska		1890	15
Nevada		1888	11
New Hampshire		1888	10
New Jersey		1888	71
New Mexico			1
New York	State Station	1888	23
	Cornell Station	1889	19
North Carolina		1889	72
North Dakota		1888	18

a Part I.

Station.	Report for the year.	Bulletin number.
Ohio	1887	6f
Oregon	1889	5
Pennsylvania	1888	11
Rhode Island	1890	.....
South Carolina	1888	7
South Dakota	.....	.....
Tennessee	1888	a3
Texas	1889	11
Utah	.....	1
Vermont	1888	20
Virginia	.....	.....
West Virginia	1889	6
Wisconsin	1889	24

a Vol. III.

The compilers have also examined all transactions of agricultural societies and reports of state boards of agriculture issued prior to the establishment of experiment stations in the respective States, which were accessible in the Yale University library, as well as the files of the American chemical journals. The bulletins of the Division of Chemistry of the U. S. Department of Agriculture, the reports of the U. S. Department of Agriculture, and the bulletins and reports of the Ontario Agricultural College, and the Central Experiment Station at Ottawa, Canada, have likewise been searched for analyses of feeding stuffs.

Each analysis is designated by number to facilitate cross-reference. The sum of all ingredients as given in a considerable number of analyses was found to be more or less than 100 per cent. If the difference was less than half a per cent this difference has been added to or subtracted from the nitrogen-free extract; if more than half a per cent the analysis has been inserted in the table uncorrected, but with a footnote calling attention to it, and has been excluded from the average.

It has been our aim to limit ourselves quite strictly to mere compilation, thus presenting in the most accessible shape a complete record of the work which has been done in this country in the line of proximate analysis of feeding stuffs, with a reference in every case to the original publication.

It is probable that there was greater divergence in the methods of analysis in this country in former years than there is at present, although it is within our knowledge that analyses made at the Bussey Institution and at the Connecticut Experiment Station at Middletown, beginning in 1875, and at New Haven, beginning in 1877, as well as those made still earlier at New Haven in the Sheffield Scientific School, were all done by the original Weende methods of Henneberg and Stohmann until the methods were modified to accord with those of the Association of Official Agricultural Chemists. These include nearly all the analyses made previous to 1880.

The American Association of Official Agricultural Chemists, which was organized in 1884 and which first took up the consideration of methods of the proximate analysis of feeding stuffs in 1887, has done very much to introduce uniformity into the methods and work of all

laboratories in this country, and it is believed that since 1887 the official methods of the Association have come into use in nearly all our station laboratories. In view of this fact we have aimed to arrange the different analyses of each material in something like chronological order. Other things being equal, the later analyses of different laboratories should be more nearly comparable with each other than the older analyses.

Realizing the difficulties and uncertainties of computing averages from the data collected, we have still felt justified in inserting statements of the average composition of most of the feeding stuffs. Our object has been to supply data which might serve as a help and general guide in practical cattle feeding till further study and more accurate analyses shall provide something better.

It is too much to hope that this work is free from errors. The compilers therefore request that any errors or omissions discovered in it may be reported to them, that such correction as is possible may be made.

Connecticut Agricultural Experiment Station,
New Haven, Connecticut, May 20, 1891.

AVERAGE COMPOSITION OF AMERICAN FEEDING STUFFS.

AVERAGE COMPOSITION OF AMERICAN

COMPILED AND CALCULATED BY E. H.

	Number of analyses.	In fresh or air-dry material.								
		Water.			Ash.			Protein (N×6.25).		
		Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.
GREEN FODDER.										
CEREAL GRASSES:										
Corn (maize) fodder *a*—	%	%	%	%	%	%	%	%	%	%
Flint varieties	40	51.5	90.8	**79.8**	0.7	1.8	**1.1**	0.6	4.0	**2.0**
Flint varieties, cut after kernels had glazed	10*b*	69.7	83.7	**77.1**	0.9	1.7	**1.1**	1.5	2.7	**2.1**
Dent varieties	63	59.5	93.6	**79.0**	0.6	2.5	**1.2**	0.5	3.8	**1.7**
Dent varieties, cut after kernels had glazed	7	59.5	80.7	**73.4**	1.0	2.2	**1.5**	1.0	3.3	**2.0**
Sweet varieties	21	69.3	92.9	**79.1**	0.8	2.6	**1.3**	0.9	2.7	**1.9**
All varieties	126*c*	51.5	93.6	**79.3**	0.6	2.6	**1.2**	0.5	4.0	**1.8**
Leaves and husks, cut green	4	57.9	71.3	**66.2**	2.1	4.4	**2.9**	1.8	2.4	**2.1**
Stripped stalks, cut green	4	74.5	77.4	**76.1**	0.6	0.8	**0.7**	0.4	0.6	**0.5**
Sorghum, whole plant	11	63.9	86.4	**79.4**	0.7	2.3	**1.1**	0.9	2.6	**1.3**
Rye fodder	7	74.7	84.3	**76.6**	1.3	2.4	**1.8**	2.3	3.0	**2.6**
Oat fodder	5	31.3	78.6	**62.2**	1.5	4.2	**2.5**	1.5	6.1	**3.4**
OTHER GRASSES:										
Redtop *d* (*Agrostis vulgaris*) in bloom	5	57.3	76.2	**64.8**	1.7	2.8	**2.3**	2.0	4.3	**3.3**
Tall oat grass *e* (*Arrhenatherum avenaceum*) in bloom	3	62.3	73.5	**69.5**	1.6	3.0	**2.0**	1.7	3.3	**2.4**
Orchard grass (*Dactylis glomerata*) in bloom	4	66.9	77.3	**73.0**	1.6	2.9	**2.0**	1.9	4.1	**2.6**
Meadow fescue (*festuca pratensis*) in bloom	4	67.6	73.2	**69.9**	1.6	2.0	**1.8**	1.8	2.7	**2.4**
Timothy *f* (*Phleum pratense*)—										
All analyses	56	47.0	78.7	**61.6**	1.4	3.2	**2.1**	1.3	3.8	**3.1**
Before bloom, headed	3	61.7	78.6	**69.3**	1.8	1.8	**2.3**	3.0	3.6	**3.4**
In full bloom	14	57.3	71.9	**65.1**	1.4	2.5	**2.0**	1.3	3.7	**2.8**
Just after bloom	5	56.3	65.2	**59.4**	1.7	2.9	**2.3**	2.0	3.8	**2.9**
In seed, nearly ripe	4	53.0	77.8	**62.3**	1.6	2.8	**2.2**	2.0	3.0	**2.5**
Kentucky blue grass *g* (*Poa pratensis*)—										
All analyses	18	51.7	82.5	**65.1**	1.6	4.8	**2.8**	2.4	7.2	**4.1**
Before bloom, headed	3	59.9	70.8	**64.7**	1.6	3.7	**2.8**	4.1	7.2	**5.3**
In bloom	5	62.9	75.7	**69.1**	1.6	3.1	**2.4**	2.4	3.6	**3.2**
Past bloom and in seed	4	51.7	55.9	**54.4**	2.8	4.8	**3.4**	3.3	5.5	**4.2**
LEGUMES:										
Red clover (*Trifolium pratense*)—										
All analyses	43	47.1	91.8	**70.8**	0.9	4.0	**2.1**	1.7	7.1	**4.4**
Before bloom	2	61.2	82.7	**72.0**	1.5	3.2	**2.4**	4.4	5.5	**5.0**
In bloom	5	47.1	91.8	**72.7**	0.9	4.0	**2.2**	1.7	7.1	**4.3**
After bloom and in seed	4	61.1	71.2	**68.2**	1.9	2.5	**2.2**	4.0	5.5	**4.5**
Alsike clover *h* (*Trifolium hybridum*) in bloom	4	72.3	77.3	**74.8**	1.9	2.1	**2.0**	3.6	4.2	**3.9**
Alfalfa *i* (*Medicago sativa*)—										
All analyses	23	49.3	82.0	**71.8**	1.8	5.1	**2.7**	3.5	7.7	**4.8**
Cowpea (*Dolichos*)	10	72.8	93.1	**83.6**	1.2	2.7	**1.7**	1.5	3.5	**2.4**
Soja bean (*Soja hispida*)	6	69.4	81.2	**74.8**	2.2	2.6	**2.4**	2.2	3.9	**3.0**
SILAGE.										
Corn (maize) silage	99	62.4	87.7	**79.1**	0.3	3.3	**1.4**	0.7	3.6	**1.7**
Corn (maize) kernels, ensiled	9	21.1	54.4	**41.3**	0.6	1.7	**1.0**	4.6	10.1	**6.0**
Sorghum silage	6	71.9	78.0	**76.1**	0.8	1.2	**1.1**	0.6	0.9	**0.8**
Brewers' grain silage	3	66.8	73.9	**69.8**	1.0	1.4	**1.2**	5.9	7.1	**6.6**
Red clover silage	5	61.4	78.6	**72.0**	1.9	3.0	**2.6**	3.0	5.9	**4.2**

a Corn fodder is the entire plant, usually a thickly planted crop. Corn stover is what is left after the ears are harvested.

b Included in the analyses immediately preceding.

c Including two unclassified varieties.

d Herd's grass of Pennsylvania.

e Meadow oat grass.

f Herd's grass of New England and New York.

g June grass.

h Swedish clover.

i Lucern.

FEEDING STUFFS, WITH MAXIMA AND MINIMA.

JENKINS AND A. L. WINTON.

In fresh or air-dry material.									Calculated to water-free substance.				
Fiber.			Nitrogen-free extract.			Fat.			Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.
Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Average.	Average.	Average.	Average.	Average.
%	%	%	%	%	%	%	%	%	%	%	%	%	%
2.1	11.4	**4.3**	4.3	36.3	**12.1**	0.3	1.3	**0.7**	5.2	9.7	21.3	60.6	3.2
3.0	6.1	**4.3**	10.0	19.7	**14.6**	0.6	1.3	**0.8**	5.0	9.2	18.9	63.2	3.7
2.0	11.0	**5.6**	3.0	27.0	**12.0**	0.1	1.6	**0.5**	5.7	8.3	26.3	57.1	2.6
5.4	8.5	**6.7**	11.6	27.0	**15.5**	0.4	1.6	**0.9**	5.4	7.5	25.2	58.7	3.2
1.9	8.5	**4.4**	3.2	19.4	**12.8**	0.1	1.0	**0.5**	6.0	8.9	21.2	61.7	2.2
1.9	11.4	**5.0**	3.0	36.3	**12.2**	0.1	1.6	**0.5**	5.6	8.8	24.1	58.9	2.6
6.6	12.5	**8.7**	16.7	22.2	**19.0**	1.0	1.3	**1.1**	8.5	6.2	25.7	56.4	3.2
6.7	8.8	**7.3**	14.2	16.6	**14.9**	0.4	0.6	**0.5**	2.9	2.3	30.7	62.0	2.1
4.7	9.1	**6.1**	5.3	21.5	**11.6**	0.2	1.1	**0.5**	5.3	6.5	29.7	56.2	2.3
4.7	14.0	**11.6**	4.9	12.4	**6.8**	0.2	0.7	**0.6**	7.7	11.1	49.5	29.2	2.5
7.1	16.8	**11.2**	10.8	39.8	**19.3**	0.4	3.0	**1.4**	6.6	9.1	29.5	51.1	3.7
6.5	15.7	**9.4**	11.7	24.1	**19.1**	0.6	2.2	**1.2**	6.6	9.4	26.8	53.9	3.3
9.2	9.7	**9.4**	13.0	20.7	**15.8**	0.6	1.5	**0.9**	6.7	7.8	30.7	51.8	3.0
5.8	11.1	**8.2**	9.9	16.6	**13.3**	0.7	1.3	**0.9**	7.4	9.6	30.4	49.3	3.3
10.2	11.3	**10.8**	12.5	15.7	**14.3**	0.7	1.1	**0.8**	6.0	8.0	35.7	47.5	2.8
5.1	19.4	**11.8**	10.1	28.6	**20.2**	0.6	2.0	**1.2**	5.4	8.0	30.7	52.8	3.1
5.1	12.7	**8.3**	10.1	19.4	**15.7**	0.8	1.3	**1.1**	7.7	11.3	26.3	50.9	3.8
6.4	13.0	**10.4**	13.9	22.4	**18.7**	0.7	1.5	**1.0**	5.7	7.9	29.9	53.6	2.9
11.1	13.7	**12.6**	18.0	23.6	**21.5**	0.9	2.0	**1.3**	5.7	7.1	30.9	53.2	3.1
5.1	15.8	**11.5**	11.3	28.6	**20.4**	0.8	1.8	**1.1**	5.7	6.6	30.7	54.2	2.8
3.8	14.8	**9.1**	6.5	26.6	**17.6**	0.8	1.9	**1.3**	8.0	11.8	26.2	50.3	3.7
6.7	12.8	**9.5**	14.9	19.0	**16.3**	1.2	1.6	**1.4**	8.0	15.1	26.8	46.1	4.0
6.7	10.8	**8.3**	11.2	18.7	**16.1**	0.8	1.2	**0.9**	7.7	10.3	26.7	52.3	3.0
10.6	14.8	**11.8**	23.2	26.6	**24.5**	1.5	1.9	**1.7**	7.5	9.1	25.8	53.9	3.7
1.8	14.7	**8.1**	3.5	25.8	**13.5**	0.3	1.8	**1.1**	7.2	15.3	27.8	45.8	3.9
2.3	10.8	**6.5**	8.1	18.6	**13.3**	0.7	1.0	**0.8**	8.6	17.8	23.2	47.5	2.9
1.8	14.7	**6.5**	3.5	25.8	**13.4**	0.3	1.3	**0.9**	8.1	15.7	23.8	49.2	3.2
5.0	12.4	**7.2**	12.9	20.2	**16.7**	0.9	1.7	**1.2**	6.9	14.2	22.6	52.5	3.8
5.3	9.4	**7.4**	10.8	11.5	**11.0**	0.6	1.2	**0.9**	7.8	15.3	29.2	44.0	3.7
2.5	14.8	**7.4**	7.9	26.2	**12.3**	0.5	2.2	**1.0**	9.4	17.1	26.2	43.9	3.4
1.7	15.3	**4.8**	1.8	12.9	**7.1**	0.2	0.6	**0.4**	10.5	14.3	29.0	43.6	2.6
5.6	8.9	**7.3**	5.8	16.0	**11.5**	0.7	1.5	**1.0**	9.5	12.0	29.0	45.7	3.8
3.0	10.5	**6.0**	5.1	24.2	**11.1**	0.2	2.0	**0.8**	6.6	8.0	28.7	53.0	3.8*
0.8	3.7	**1.5**	35.7	59.1	**46.6**	2.8	4.4	**3.6**	1.7	10.2	2.6	79.4	6.1
5.9	6.8	**6.4**	13.8	19.0	**15.3**	0.1	0.5	**0.3**	4.4	3.3	26.8	64.2	1.3
3.9	5.4	**4.7**	13.7	16.9	**15.6**	1.8	2.6	**2.1**	4.0	22.0	15.4	51.7	7.0
5.1	13.9	**8.4**	8.1	14.3	**11.6**	0.9	1.6	**1.2**	9.3	14.9	29.9	41.7	4.1

AVERAGE COMPOSITION OF AMERICAN FEEDING

	No. of analyses.	In fresh or air-dry material.								
		Water.			Ash.			Protein (N×6.25).		
		Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.
HAY AND DRY COARSE FODDER.		%	%	%	%	%	%	%	%	%
Corn (maize) fodder, field-cured	35	22.9	60.2	**42.2**	1.5	5.5	**2.7**	2.7	6.8	**4.5**
Corn (maize) leaves, field-cured	17	14.8	44.0	**30.0**	4.3	7.4	**5.5**	4.5	8.3	**6.0**
Corn (maize) husks, field-cured	16	26.7	76.6	**50.9**	0.6	2.3	**1.8**	1.3	3.2	**2.5**
Corn (maize) stalks, field-cured	15	51.3	78.5	**68.4**	0.6	2.0	**1.2**	1.2	3.0	**1.9**
Corn (maize) stover, field-cured	60	15.4	57.4	**40.1**	1.7	7.0	**3.4**	1.8	8.3	**3.8**
Hay from grasses named:										
Couch grass[a] (*Agropyrum repens*)	5	6.3	14.3	**14.3**	4.8	8.0	**6.0**	8.5	10.8	**8.8**
Redtop (*Agrostis vulgaris*)—										
All analyses	9	6.8	11.6	**8.9**	3.8	7.0	**5.2**	5.9	10.4	**7.9**
Cut in bloom	3	6.8	11.6	**8.7**	4.8	6.5	**4.9**	7.8	10.4	**8.0**
Orchard grass (*Dactylis glomerata*)	10	6.5	13.6	**9.9**	5.0	7.9	**6.0**	6.6	16.4	**8.1**
Timothy (*Phleum pratense*)—										
All analyses	68	6.1	28.9	**13.2**	2.5	6.3	**4.4**	3.8	9.7	**5.9**
Cut in full bloom	12	7.6	28.9	**15.0**	2.5	6.0	**4.5**	5.6	7.5	**6.0**
Cut soon after bloom	11	7.8	21.6	**14.2**	3.5	5.4	**4.4**	4.6	8.1	**5.7**
Cut when nearly ripe	12	7.0	22.7	**14.1**	2.7	5.1	**3.9**	4.3	6.0	**5.0**
Hungarian grass (*Setaria italica*)	12	4.9	9.5	**7.7**	5.0	7.5	**6.0**	4.7	12.3	**7.5**
Creek sedge (*Spartina stricta*, var. *glabra*)	5	7.4	9.7	**8.3**	8.3	15.3	**10.7**	4.0	8.4	**6.6**
Hay from legumes named:										
Red clover (*Trifolium pratense*)—										
All analyses	38	6.0	31.3	**15.3**	3.9	8.3	**6.2**	10.0	20.8	**12.3**
In bloom	6	6.0	31.3	**20.8**	5.6	8.3	**6.6**	10.8	15.4	**12.4**
Red clover (*Trifolium medium*)—										
All analyses	16	7.3	29.4	**21.2**	4.5	9.5	**6.1**	9.0	16.8	**10.7**
In bloom	5	9.4	26.7	**20.9**	4.5	9.5	**6.6**	9.0	16.8	**11.5**
Alsike clover (*Trifolium hybridum*)	9	5.3	13.9	**9.7**	6.1	12.2	**8.3**	9.2	16.1	**12.8**
White clover (*Trifolium repens*)	7	6.1	13.5	**9.7**	4.5	13.8	**8.3**	13.9	20.0	**15.7**
Alfalfa (*Medicago sativa*)	21	4.6	16.0	**8.4**	3.1	10.4	**7.4**	10.2	20.3	**14.3**
Cowpea (*Dolichos*)	8	7.6	14.0	**10.7**	3.2	10.2	**7.5**	13.6	20.3	**16.6**
Black grass (*Juncus gerardi*)	26	6.7	13.2	**9.5**	4.9	9.2	**7.0**	5.3	11.6	**7.5**
Wheat straw	7	6.5	17.9	**9.6**	3.0	7.0	**4.2**	2.9	5.0	**3.4**
Rye straw	7	6.3	9.7	**7.1**	2.8	3.4	**3.2**	2.2	3.6	**3.0**
Oat straw	12	6.5	18.3	**9.2**	3.7	6.7	**5.1**	2.7	6.9	**4.0**
Buckwheat straw	3	9.0	10.4	**9.9**	4.9	6.5	**5.5**	3.3	7.8	**5.2**
ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES.										
Potatoes	12	75.4	82.2	**78.9**	0.8	1.2	**1.0**	1.1	3.0	**2.1**
Sweet potatoes	6	66.0	74.4	**71.1**	0.7	1.3	**1.0**	0.5	3.6	**1.5**
Red beets	9	85.5	92.2	**88.5**	0.7	1.4	**1.0**	1.1	1.8	**1.5**
Sugar beets	19	80.5	90.8	**86.5**	0.4	1.4	**0.9**	1.1	3.2	**1.8**
Mangel-wurzels	9	86.9	94.4	**90.9**	0.8	1.4	**1.1**	1.0	1.9	**1.4**
Turnips	3	87.2	92.4	**90.5**	0.7	1.0	**0.8**	0.8	1.4	**1.1**
Ruta-bagas	4	87.1	91.8	**88.6**	1.0	1.4	**1.2**	1.0	1.3	**1.2**
Carrots	8	86.5	91.1	**88.6**	0.6	1.3	**1.0**	0.8	2.0	**1.1**
Onions	6	81.5	93.5	**87.6**	0.4	0.7	**0.6**	0.8	2.3	**1.4**
Cucumbers	2	95.7	96.3	**96.0**	0.5	0.5	**0.5**	0.8	0.8	**0.8**
Cabbage	2	87.5	93.6	**90.5**	0.7	2.1	**1.4**	2.1	2.7	**2.4**
Asparagus	3	93.6	94.3	**94.0**	0.5	1.0	**0.7**	1.6	2.1	**1.8**
Strawberries	19	87.7	94.0	**90.8**	0.4	0.8	**0.6**	0.6	1.2	**1.0**
Lemons	2	88.4	90.2	**89.3**	0.5	0.5	**0.5**	0.8	1.1	**1.0**
GRAINS AND OTHER SEEDS.										
Corn (maize) kernel—										
Dent, raised in Connecticut	9	9.6	15.2	**10.8**	1.2	1.8	**1.5**	8.3	11.6	**10.1**
Dent, raised in Kansas	6	11.4	12.3	**11.9**	1.3	1.7	**1.5**	9.1	10.7	**10.2**

[a] Corn fodder is the entire plant, usually a thickly planted crop; corn stover is what is left after the ears are harvested.

STUFFS, WITH MAXIMA AND MINIMA—Continued.

In fresh or air-dry material.									Calculated to water-free substance.				
Crude fiber.			Nitrogen-free extract.			Fat.			Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.
Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Average.	Average.	Average.	Average.	Average.
%	%	%	%	%	%	%	%	%	%	%	%	%	%
7.5	24.7	**14.3**	20.6	47.8	**34.7**	0.6	2.5	**1.6**	4.7	7.8	24.7	60.1	2.8
17.4	27.4	**21.4**	27.3	44.1	**35.7**	0.8	2.2	**1.4**	7.9	8.6	30.6	51.0	1.9
6.8	23.6	**15.8**	14.3	43.6	**28.3**	0.5	1.0	**0.7**	3.5	5.0	32.2	57.9	1.4
6.9	16.8	**11.0**	11.2	26.0	**17.0**	0.3	1.0	**0.5**	3.6	5.9	34.8	54.1	1.6
14.1	32.2	**19.7**	23.3	53.3	**31.9**	0.7	2.2	**1.1**	5.7	6.4	33.0	53.2	1.7
16.6	34.5	**24.8**	38.5	49.5	**43.1**	2.9	3.4	**3.0**	7.0	10.3	29.1	50.2	3.5
24.0	31.8	**28.6**	44.8	50.4	**47.4**	1.4	3.2	**1.9**	5.7	8.7	31.4	52.1	2.1
24.0	31.8	**29.9**	46.8	47.8	**46.4**	1.5	2.3	**2.1**	5.4	8.7	32.8	50.8	2.3
28.9	38.3	**32.4**	32.9	48.6	**41.0**	1.7	3.3	**2.6**	6.7	9.0	36.0	45.4	2.9
22.2	38.5	**29.0**	34.3	58.5	**45.0**	1.0	4.0	**2.5**	5.1	6.8	33.5	51.7	2.9
22.2	37.1	**29.6**	34.3	48.5	**41.9**	2.0	4.0	**3.0**	5.3	7.1	34.7	49.4	3.5
25.7	33.4	**28.1**	37.0	51.0	**44.6**	1.9	3.6	**3.0**	5.1	6.6	32.7	52.1	3.5
24.8	38.5	**31.1**	38.0	49.1	**43.7**	1.0	2.8	**2.2**	4.5	5.8	36.2	50.9	2.6
23.6	31.3	**27.7**	44.4	53.0	**49.0**	1.5	3.5	**2.1**	6.5	8.1	30.0	53.1	2.3
25.5	27.7	**26.9**	39.0	51.3	**45.4**	1.8	2.2	**2.1**	11.6	7.1	29.3	49.7	2.3
15.6	35.7	**24.8**	27.3	52.2	**38.1**	1.5	5.9	**3.3**	7.3	14.5	29.1	45.2	3.9
17.9	28.1	**21.9**	27.3	41.3	**33.8**	2.5	5.9	**4.5**	8.3	15.6	27.5	43.0	5.6
18.3	29.4	**24.5**	28.6	44.4	**33.6**	1.6	5.3	**3.9**	7.3	13.5	31.3	43.0	4.9
18.3	27.8	**24.7**	28.6	44.4	**33.0**	1.6	5.1	**3.3**	8.2	14.6	31.1	41.9	4.2
19.7	29.5	**25.6**	35.6	45.9	**40.7**	1.6	4.2	**2.9**	9.3	14.2	28.4	44.9	3.2
20.3	30.3	**24.1**	33.4	47.3	**39.3**	1.7	5.8	**2.9**	9.2	17.4	26.7	43.5	3.2
14.0	33.0	**25.0**	35.1	53.6	**42.7**	1.1	3.8	**2.2**	8.1	15.6	27.3	46.6	2.4
16.4	26.0	**20.1**	39.4	49.5	**42.2**	1.1	3.7	**2.9**	8.5	18.6	22.5	47.2	3.2
20.4	35.9	**25.9**	42.6	53.4	**47.7**	1.1	3.2	**2.4**	7.6	8.2	28.5	53.0	2.7
34.3	42.7	**38.1**	31.0	50.6	**43.4**	0.8	1.8	**1.3**	4.6	3.8	42.1	48.1	1.4
32.7	43.3	**38.9**	41.0	52.9	**46.6**	1.0	1.6	**1.2**	3.4	3.2	41.9	50.2	1.3
31.8	45.1	**37.0**	33.5	51.4	**42.4**	1.7	3.2	**2.3**	5.6	4.4	40.7	46.8	2.5
37.2	46.8	**43.0**	32.1	38.9	**35.1**	0.7	1.7	**1.3**	6.1	5.8	47.7	39.0	1.4
0.3	0.9	**0.6**	14.1	20.4	**17.3**	0.0	0.1	**0.1**	4.5	10.1	2.7	82.2	0.5
0.6	2.5	**1.3**	18.0	29.7	**24.7**	0.3	0.6	**0.4**	3.5	5.2	3.6	86.3	1.4
0.6	1.7	**0.9**	3.8	11.3	**8.0**	0.1	0.2	**0.1**	9.1	13.4	7.8	68.4	1.3
0.6	1.3	**0.9**	5.7	13.6	**9.8**	0.1	0.2	**0.1**	6.5	13.0	6.5	73.3	0.7
0.6	1.3	**0.9**	2.4	8.7	**5.5**	0.1	0.5	**0.2**	11.5	15.2	9.5	62.0	1.8
0.8	1.4	**1.2**	4.2	8.8	**6.2**	0.1	0.2	**0.2**	8.4	12.4	12.2	64.9	2.1
1.1	1.4	**1.3**	5.1	9.1	**7.5**	0.1	0.3	**0.2**	10.1	10.4	11.0	66.8	1.3
0.9	2.3	**1.3**	5.1	10.4	**7.6**	0.2	0.7	**0.4**	8.8	10.0	11.2	66.3	3.7
0.6	0.8	**0.7**	3.8	14.7	**9.4**	0.2	0.4	**0.3**	4.5	11.3	5.5	76.5	2.2
0.5	0.9	**0.7**	1.7	2.0	**1.8**	0.2	0.2	**0.2**	11.5	20.3	17.3	45.4	5.5
1.4	1.5	**1.5**	2.0	5.7	**3.9**	0.2	0.5	**0.4**	14.8	25.1	15.5	40.7	3.9
0.7	0.8	**0.7**	2.3	2.9	**2.5**	0.2	0.3	**0.3**	11.1	30.2	12.2	42.3	4.2
0.7	2.3	**1.4**	3.7	6.4	**5.5**	0.4	1.1	**0.7**	6.5	10.4	15.6	60.1	7.4
0.9	1.3	**1.1**	6.9	7.6	**7.2**	0.2	1.6	**0.9**	4.7	8.8	10.1	67.9	8.5
1.3	2.2	**1.7**	69.8	73.4	**71.3**	3.8	5.2	**4.4**	1.7	11.3	1.8	80.1	5.0
1.7	2.7	**2.2**	68.4	71.7	**69.3**	4.5	5.7	**4.9**	1.7	11.6	2.5	78.6	5.6

AVERAGE COMPOSITION OF AMERICAN FEEDING

	Number of analyses.	In fresh or air-dry material.								
		Water.			Ash.			Protein (N×6.25).		
		Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.
GRAINS AND OTHER SEEDS—Continued.										
Corn (maize) kernel—continued.		%	%	%	%	%	%	%	%	%
Dent, raised in Michigan	7	11.7	14.1	**13.1**	1.3	1.6	**1.4**	9.9	11.8	**11.0**
Dent, raised in Missouri	22	7.4	9.1	**8.2**	1.3	2.1	**1.7**	8.2	12.8	**10.5**
Dent, raised in Texas	19	9.3	12.1	**10.6**	1.0	1.7	**1.4**	9.8	11.0	**10.4**
Dent, raised in Wisconsin	5	13.7	19.4	**17.0**	1.3	2.6	**1.7**	8.7	10.3	**9.4**
Dent, all analyses	86	6.2	19.4	**10.6**	1.0	2.6	**1.5**	7.5	12.8	**10.3**
Flint, raised in Connecticut	11	8.7	18.2	**14.2**	1.0	1.6	**1.3**	8.9	11.6	**10.1**
Flint, raised in Massachusetts	12	8.9	14.4	**11.1**	1.1	1.6	**1.4**	7.9	12.9	**11.1**
Flint, raised in Michigan	4	12.9	13.5	**13.2**	1.4	1.5	**1.5**	10.7	12.0	**11.5**
Flint, raised in New Hampshire	11	8.3	11.5	**10.1**	1.3	1.8	**1.5**	10.5	13.7	**11.6**
Flint, all analyses	68	4.5	19.6	**11.3**	1.0	1.9	**1.4**	7.0	13.7	**10.5**
Sweet, raised in Massachusetts	6	6.3	10.9	**8.7**	1.6	1.9	**1.8**	11.6	14.4	**12.8**
Sweet, raised in Pennsylvania	8	7.0	9.5	**8.0**	1.7	2.4	**2.0**	9.5	11.7	**10.7**
Sweet, all analyses	26	6.0	10.9	**8.8**	1.4	2.4	**1.9**	9.5	15.3	**11.6**
Pop varieties	4	8.6	12.6	**10.7**	1.2	1.7	**1.5**	9.7	13.1	**11.2**
Soft varieties	5	6.1	14.1	**9.3**	1.4	1.9	**1.6**	8.8	14.6	**11.4**
All varieties and analyses	208	4.5	20.7	**10.9**	1.0	2.6	**1.5**	7.0	15.3	**10.5**
Field-cured, dent varieties	17	28.8	39.3	**34.2**	0.7	1.3	**0.9**	4.4	8.3	**6.3**
Small and from immature ears	9	31.2	57.5	**38.9**	0.7	1.2	**0.9**	5.4	8.6	**6.8**
Field-cured, flint varieties	48	22.0	32.1	**27.1**	0.6	1.6	**1.3**	5.6	10.6	**8.0**
Small and from immature ears	7	24.0	74.8	**34.5**	0.4	1.0	**0.8**	3.3	10.3	**7.9**
Sorghum seed	10	9.3	16.8	**12.8**	1.4	4.3	**2.1**	7.7	11.3	**9.1**
Barley	10	7.2	12.6	**10.9**	1.8	3.2	**2.4**	8.6	15.7	**12.4**
Oats	30	8.9	13.5	**11.0**	2.0	3.6	**3.0**	8.0	14.4	**11.8**
Rye	6	8.7	13.2	**11.6**	1.8	1.9	**1.9**	9.5	12.1	**10.6**
Wheat, spring varieties	13	8.1	13.4	**10.4**	1.5	2.6	**1.9**	8.1	15.4	**12.5**
Wheat, winter varieties, raised in—										
Alabama	17	9.4	12.4	**10.9**	1.8	2.4	**2.0**	9.8	13.7	**11.4**
California	4	10.7	11.2	**11.0**	1.5	2.0	**1.8**	8.3	13.8	**11.1**
Colorado	50	7.9	10.6	**9.6**	1.8	3.6	**2.2**	11.2	15.9	**13.3**
Georgia	8	8.0	12.2	**9.9**	1.6	2.3	**1.9**	9.5	14.0	**11.6**
Indiana	8	9.9	12.4	**10.8**	1.4	2.1	**1.8**	11.9	14.5	**13.2**
Maryland	9	8.4	11.9	**10.5**	1.4	2.2	**1.8**	9.8	14.5	**11.7**
Michigan	23	9.1	13.8	**10.8**	1.0	2.1	**1.7**	9.1	15.2	**11.6**
Missouri	12	7.7	13.5	**9.8**	1.6	2.2	**1.9**	10.5	14.0	**11.6**
New Jersey	13	13.3	14.0	**13.7**	1.8	2.2	**2.0**	9.2	12.5	**10.3**
North Carolina	22	8.2	11.7	**10.0**	1.2	1.9	**1.6**	8.0	12.4	**10.4**
Oregon	5	9.0	13.0	**9.9**	1.5	2.0	**1.7**	8.1	10.6	**8.6**
Pennsylvania	41	7.6	13.3	**10.7**	0.8	3.0	**1.6**	9.5	15.6	**11.8**
Tennessee	14	7.1	11.9	**10.2**	1.6	2.4	**1.9**	10.0	16.6	**12.5**
Virginia	11	8.8	12.3	**10.3**	1.1	2.5	**1.7**	10.2	14.0	**12.2**
Wheat, winter varieties, all analyses	262	7.1	14.0	**10.5**	0.8	3.6	**1.8**	8.1	16.6	**11.8**
Wheat, all complete analyses of all varieties	310	7.1	14.0	**10.5**	0.8	3.6	**1.8**	8.1	17.2	**11.9**
Rice	10	11.4	14.0	**12.4**	0.3	0.5	**0.4**	5.9	8.6	**7.4**
Buckwheat	8	10.9	14.8	**12.6**	1.6	2.3	**2.0**	8.6	11.0	**10.0**
Soja bean	8	5.9	19.3	**10.8**	3.1	5.4	**4.7**	26.3	40.2	**34.0**
Cowpea	5	10.0	20.9	**14.8**	2.9	3.4	**3.2**	19.3	23.0	**20.8**
MILL PRODUCTS.										
Corn (maize) meal	77	8.0	27.4	**15.0**	0.9	4.1	**1.4**	7.1	13.9	**9.2**
Corn-and-cob meal	7	9.5	26.3	**15.1**	1.2	1.9	**1.5**	5.8	12.2	**8.5**
Oatmeal	6	6.2	8.8	**7.9**	1.8	2.2	**2.0**	12.0	16.3	**14.7**
Barley meal	3	9.9	13.6	**11.9**	1.6	3.8	**2.6**	9.8	12.7	**10.5**
Rye flour	4	12.4	13.6	**13.1**	0.6	0.8	**0.7**	6.0	6.9	**6.7**
Wheat flour, all analyses	20	8.2	13.6	**12.4**	0.3	0.7	**0.5**	8.6	13.6	**10.8**
Graham flour	3	12.1	13.7	**13.1**	1.7	2.0	**1.8**	11.2	12.4	**11.7**
Buckwheat flour	4	12.8	17.6	**14.6**	0.7	1.3	**1.0**	4.2	8.1	**6.0**

STUFFS, WITH MAXIMA AND MINIMA—Continued.

In fresh or air-dry material.									Calculated to water-free substance.				
Crude fiber.			Nitrogen-free extract.			Fat.			Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.
Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Average.	Average.	Average.	Average.	Average.
%	%	%	%	%	%	%	%	%	%	%	%	%	%
2.0	2.5	**2.3**	66.3	69.1	**67.4**	4.6	5.0	**4.8**	1.6	12.6	2.6	77.7	5.5
1.4	3.1	**2.4**	69.8	74.8	**71.8**	4.3	7.5	**5.4**	1.9	11.4	2.6	78.2	5.9
1.8	4.8	**2.8**	66.7	71.4	**69.3**	5.0	6.6	**5.5**	1.6	11.6	3.1	77.6	6.1
1.3	2.9	**1.8**	65.4	68.1	**66.3**	3.1	4.3	**3.8**	2.9	11.3	2.1	79.1	4.6
0.9	4.8	**2.2**	65.4	75.7	**70.4**	3.1	7.5	**5.0**	1.7	11.5	2.6	78.6	5.6
0.8	1.5	**1.2**	65.0	72.3	**68.6**	3.9	5.7	**4.6**	1.5	11.8	1.3	80.0	5.4
1.1	2.5	**1.9**	66.5	74.2	**69.8**	3.4	5.9	**4.7**	1.6	12.4	2.1	78.6	5.3
2.0	2.5	**2.2**	66.0	67.4	**66.6**	4.8	5.1	**5.0**	1.7	13.2	2.5	76.8	5.8
0.8	1.3	**1.1**	67.6	73.3	**70.2**	4.7	7.1	**5.5**	1.7	12.8	1.2	78.2	6.1
0.7	2.9	**1.7**	65.0	76.7	**70.1**	3.4	7.1	**5.0**	1.7	11.8	1.9	79.0	5.6
1.6	2.6	**2.1**	65.5	68.9	**67.0**	3.8	9.2	**7.6**	2.0	14.0	2.3	73.4	8.3
3.0	5.2	**3.7**	62.5	69.1	**66.6**	7.8	11.9	**9.0**	2.2	11.6	4.0	72.4	9.8
1.5	5.2	**2.8**	61.8	72.4	**66.8**	3.8	11.9	**8.1**	2.1	12.8	3.1	73.2	8.8
1.2	2.3	**1.8**	68.4	71.1	**69.6**	4.2	6.0	**5.2**	1.7	12.5	2.0	78.0	5.8
1.3	3.3	**2.0**	66.0	75.5	**70.2**	5.0	5.7	**5.5**	1.8	12.5	2.2	77.4	6.1
0.7	5.2	**2.1**	61.8	76.7	**69.6**	3.1	11.9	**5.4**	1.7	11.7	2.4	78.1	6.1
0.9	1.8	**1.2**	50.3	59.4	**53.9**	2.9	4.0	**3.5**	1.3	9.6	1.8	81.9	5.4
0.9	1.1	**1.1**	33.5	54.1	**49.0**	1.8	4.3	**3.4**	1.5	11.1	2.0	80.0	5.4
0.7	1.6	**1.3**	53.9	64.4	**58.1**	3.4	5.3	**4.2**	1.7	10.9	1.8	79.8	5.8
0.3	1.0	**0.8**	19.9	62.5	**52.4**	1.4	3.0	**3.6**	1.3	11.9	1.2	80.6	5.0
1.5	8.7	**2.6**	59.0	73.6	**70.0**	2.1	4.6	**3.6**	2.4	10.4	3.0	80.1	4.1
1.3	4.2	**2.7**	66.7	73.9	**69.8**	1.5	3.2	**1.8**	2.7	13.9	3.0	78.4	2.0
1.5	12.9	**9.5**	53.5	66.9	**59.7**	3.4	5.8	**5.0**	3.4	13.2	10.8	67.0	5.6
1.4	2.1	**1.7**	71.2	73.9	**72.5**	1.4	2.1	**1.7**	2.1	12.0	1.9	82.2	1.9
1.3	2.3	**1.8**	66.1	78.7	**71.2**	1.8	2.6	**2.2**	2.1	13.9	2.0	79.5	2.5
1.3	1.9	**1.6**	68.5	74.4	**71.8**	1.6	2.7	**2.2**	2.2	12.8	1.8	80.7	2.5
1.8	2.2	**2.0**	70.2	74.8	**72.5**	1.5	1.8	**1.6**	2.0	12.5	2.2	81.5	1.8
1.1	2.2	**1.6**	62.9	74.3	**70.9**	1.6	3.9	**2.4**	2.4	14.7	1.9	78.3	2.7
1.4	2.0	**1.7**	69.6	73.8	**72.6**	2.1	2.7	**2.3**	2.1	12.8	1.9	80.7	2.5
1.6	2.4	**2.0**	69.3	71.9	**70.3**	1.6	2.3	**1.9**	1.9	14.6	2.2	79.2	2.1
1.6	2.3	**1.7**	70.3	74.8	**72.2**	1.6	2.7	**2.1**	2.0	13.0	1.9	80.8	2.3
1.1	2.4	**1.8**	70.6	75.9	**72.1**	1.3	2.5	**2.0**	1.9	13.0	2.0	80.9	2.2
1.5	2.7	**2.2**	70.0	75.2	**72.3**	1.5	2.4	**2.2**	2.1	12.8	2.3	80.4	2.4
1.6	2.0	**1.8**	68.3	72.2	**70.6**	1.4	1.7	**1.6**	2.3	11.8	2.1	82.1	1.7
0.4	2.9	**1.8**	70.9	76.6	**73.0**	2.0	2.5	**2.3**	1.8	11.5	2.0	82.1	2.6
1.2	1.9	**1.5**	74.5	77.5	**76.3**	1.7	2.3	**2.0**	1.9	9.5	1.7	84.7	2.2
0.9	2.8	**1.7**	67.9	76.1	**72.2**	1.4	2.6	**2.0**	1.8	13.2	1.9	80.9	2.2
1.5	2.9	**2.0**	66.7	74.4	**71.3**	1.7	2.3	**2.1**	2.1	13.9	2.2	79.5	2.3
1.2	2.0	**1.7**	69.6	73.7	**71.9**	1.8	2.6	**2.2**	1.9	13.6	1.9	80.1	2.5
0.4	2.9	**1.8**	66.7	77.7	**72.0**	1.3	3.9	**2.1**	2.0	13.1	2.0	80.6	2.3
0.4	3.1	**1.8**	64.8	78.6	**71.9**	1.3	3.9	**2.1**	2.0	13.3	2.0	80.4	2.3
0.1	0.4	**0.2**	77.5	80.6	**79.2**	0.3	0.6	**0.4**	0.4	8.5	0.2	90.5	0.4
7.8	9.4	**8.7**	62.6	65.4	**64.5**	2.2	2.4	**2.2**	2.3	11.5	9.9	73.7	2.6
2.5	6.1	**4.8**	26.2	32.8	**28.8**	12.3	19.0	**16.9**	5.3	38.1	5.4	32.2	18.9
3.4	5.0	**4.1**	50.5	62.0	**55.7**	1.3	1.6	**1.4**	3.8	24.4	4.8	65.5	1.7
0.5	3.1	**1.9**	60.4	74.0	**68.7**	2.0	5.1	**3.8**	1.6	10.8	2.2	81.0	4.4
4.7	9.4	**6.6**	56.8	69.7	**64.8**	2.5	4.7	**3.5**	1.7	10.0	7.8	76.4	4.1
0.6	1.2	**0.9**	66.6	69.0	**67.4**	6.1	8.8	**7.1**	2.2	15.9	1.0	73.2	7.7
5.9	7.0	**6.5**	63.5	68.0	**66.3**	1.5	3.2	**2.2**	3.0	11.9	7.3	75.3	2.5
0.4	0.5	**0.4**	77.6	79.1	**78.3**	0.8	0.9	**0.8**	0.8	7.7	0.5	90.1	1.0
0.1	1.0	**0.2**	71.5	78.5	**75.0**	0.6	1.8	**1.1**	0.5	12.3	0.2	85.8	1.2
1.8	2.0	**1.9**	69.8	70.0	**69.8**	1.7	1.9	**1.7**	2.0	13.4	2.2	80.4	2.0
0.2	0.5	**0.3**	71.1	79.4	**75.8**	0.7	1.8	**1.4**	1.2	8.0	0.4	88.8	1.6

AVERAGE COMPOSITION OF AMERICAN FEEDING

	Number of analyses.	In frosb or air-dry material.								
		Water.			Ash.			Protein (N×6.25).		
		Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.
MILL PRODUCTS—Continued.		%	%	%	%	%	%	%	%	%
Ground linseed	2	7.9	8.3	**8.1**	3.4	6.1	**4.7**	20.3	23.0	**21.6**
Pea meal	2	8.9	12.1	**10.5**	2.6	2.7	**2.6**	19.1	21.4	**20.2**
Ground corn and oats, equal parts	6	10.7	13.1	**11.9**	1.9	2.7	**2.2**	8.4	10.4	**9.6**
BY-PRODUCTS AND WASTE MATERIALS.										
Corn (maize) cob	18	7.2	24.8	**10.7**	0.7	2.7	**1.4**	1.2	3.7	**2.4**
Hominy chops	12	8.1	13.5	**11.1**	1.9	3.1	**2.5**	7.9	11.2	**9.8**
Corn (maize) germ	3	9.4	13.0	**10.7**	1.9	7.4	**4.0**	9.7	9.9	**9.8**
Gluten meal	32	6.4	12.3	**9.6**	0.1	1.7	**0.7**	21.3	35.5	**29.4**
Starch feed, wet	12	62.3	72.2	**65.4**	0.1	0.6	**0.3**	3.6	9.6	**6.1**
Oat feed	4	6.4	9.2	**7.7**	3.2	4.2	**3.7**	12.6	20.0	**16.0**
Barley screenings	2	12.0	12.4	**12.2**	3.5	3.6	**3.6**	12.1	12.5	**12.3**
Malt sprouts	4	7.3	12.0	**10.2**	3.8	6.7	**5.7**	21.0	25.9	**23.2**
Brewers' grains, wet	15	68.6	79.4	**75.7**	0.3	1.5	**1.0**	4.3	6.9	**5.4**
Brewers' grains, dried	3	6.2	11.9	**8.2**	3.3	3.8	**3.6**	19.3	20.3	**19.9**
Rye bran	7	8.2	13.7	**11.6**	2.9	4.5	**3.6**	11.5	16.8	**14.7**
Wheat bran, from spring wheat	10	7.4	13.6	**11.5**	4.0	6.0	**5.4**	14.3	18.1	**16.1**
Wheat bran, from winter wheat	7	10.6	13.6	**12.3**	5.0	6.4	**5.9**	13.9	17.8	**16.0**
Wheat bran, all analyses	88	7.4	15.8	**11.9**	2.5	7.8	**5.8**	12.1	18.9	**15.4**
Wheat middlings	32	9.2	16.0	**12.1**	1.4	6.3	**3.3**	10.1	20.0	**15.6**
Wheat shorts	12	4.1	15.5	**11.8**	2.0	6.2	**4.6**	11.1	19.4	**14.9**
Wheat screenings	10	7.8	13.6	**11.6**	1.9	3.8	**2.9**	8.3	16.9	**12.5**
Wheat screenings meal	2	7.3	12.6	**10.0**	2.9	3.2	**3.1**	6.6	9.0	**7.8**
Wheat flour of screenings	3	12.1	13.3	**12.9**	2.9	3.2	**3.0**	7.3	10.2	**8.9**
Cockle bran	3	10.2	11.8	**11.1**	3.0	3.6	**3.2**	9.4	11.9	**10.6**
Rice bran	5	8.8	10.7	**9.7**	8.4	12.4	**10.0**	10.9	13.6	**12.1**
Rice hulls	3	7.7	8.5	**8.2**	10.5	15.1	**13.2**	2.9	4.7	**3.6**
Rice polish	4	9.0	11.2	**10.0**	2.8	11.3	**6.7**	10.9	12.9	**11.7**
Buckwheat middlings	3	9.5	16.3	**13.2**	4.4	5.5	**4.8**	25.1	31.3	**28.9**
Cotton-seed meal	35	5.8	18.5	**8.2**	5.7	8.8	**7.2**	23.3	50.8	**42.3**
Cotton-seed hulls	4	10.0	11.5	**10.4**	2.3	3.0	**2.6**	3.5	4.8	**4.0**
Linseed meal, old-process	21	5.6	12.4	**9.2**	4.6	8.2	**5.7**	27.7	38.2	**32.9**
Linseed meal, new-process	14	6.0	13.4	**10.1**	5.0	6.9	**5.8**	27.1	38.4	**33.2**
Palm-nut meal	3	6.1	10.8	**8.3**	3.5	4.0	**3.7**	13.5	16.0	**14.4**
Apple pomace	7	69.9	82.5	**76.7**	0.2	0.8	**0.5**	1.0	1.7	**1.4**

STUFFS, WITH MAXIMA AND MINIMA—Continued.

In fresh or air-dry material.									Calculated to water-free substance.				
Crude fiber.			Nitrogen-free extract.			Fat.			Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.
Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Minimum.	Maximum.	Average.	Average.	Average.	Average.	Average.	Average.
%	%	%	%	%	%	%	%	%	%	%	%	%	%
5.0	9.6	**7.3**	25.5	30.2	**27.0**	30.3	30.5	**30.4**	5.1	23.4	8.1	30.4	33.0
11.1	17.7	**14.4**	50.2	52.0	**51.1**	0.9	1.5	**1.2**	2.9	22.5	16.0	57.2	1.4
.....	.....	.....	70.4*a*	73.7*a*	**71.9***a*	4.0	5.0	**4.4**	2.4	10.9	.....	81.7*	5.0
18.2	38.3	**30.1**	43.8	66.7	**54.9**	0.1	0.9	**0.5**	1.6	2.7	33.7	61.4	0.6
2.5	6.7	**3.8**	61.0	71.1	**64.5**	4.5	11.2	**8.3**	2.8	11.0	4.3	72.6	9.3
1.9	5.8	**4.1**	61.9	67.4	**64.0**	5.2	11.2	**7.4**	4.5	11.0	4.6	71.7	8.3
0.3	5.0	**1.6**	47.7	58.5	**52.4**	3.4	9.6	**6.3**	0.8	32.5	1.8	57.9	7.0
1.6	4.4	**3.1**	18.7	28.9	**22.0**	1.3	4.4	**3.1**	0.8	17.7	9.0	63.6	9.1
3.7	12.5	**6.1**	56.2	63.7	**59.4**	6.1	7.8	**7.1**	4.0	17.3	6.6	64.4	7.7
7.0	7.6	**7.3**	61.6	62.0	**61.8**	2.6	2.9	**2.8**	4.0	14.0	8.3	70.4	3.3
9.3	12.0	**10.7**	45.5	50.3	**48.5**	1.1	3.0	**1.7**	6.3	25.8	11.8	54.2	1.9
3.1	5.6	**3.8**	9.6	15.9	**12.5**	0.8	2.9	**1.6**	3.9	22.4	15.7	51.5	6.5
10.2	11.6	**11.0**	46.1	56.8	**51.7**	4.2	6.5	**5.6**	3.9	21.7	12.0	56.3	6.1
2.5	4.1	**3.5**	59.8	67.6	**63.8**	1.8	4.9	**2.8**	4.1	16.6	4.0	72.1	3.2
5.4	10.1	**8.0**	51.7	58.1	**54.5**	3.6	5.0	**4.5**	6.1	18.2	9.0	61.6	5.1
7.2	8.9	**8.1**	50.5	56.2	**53.7**	3.5	4.5	**4.0**	6.7	18.2	9.2	61.3	4.6
2.4	15.5	**9.0**	45.5	63.2	**53.9**	1.5	7.0	**4.0**	6.6	17.4	10.2	61.3	4.5
1.3	12.7	**4.6**	53.0	70.9	**60.4**	2.1	5.9	**4.0**	3.8	17.8	5.2	68.7	4.5
6.0	10.5	**7.4**	50.0	62.3	**56.8**	2.5	6.1	**4.5**	5.2	16.8	8.4	64.5	5.1
1.7	7.5	**4.9**	61.0	70.4	**65.1**	2.7	3.3	**3.0**	3.3	14.1	5.5	73.7	3.4
5.7	6.6	**6.2**	68.2	71.4	**69.8**	2.8	3.8	**3.3**	3.4	8.7	6.9	77.3	3.7
3.8	9.0	**5.5**	62.3	69.9	**66.1**	3.1	4.0	**3.6**	3.4	10.2	6.3	76.0	4.1
7.6	11.0	**9.2**	62.4	64.4	**63.5**	2.1	2.8	**2.5**	3.6	11.9	10.3	71.4	2.8
2.0	17.8	**9.5**	41.9	62.3	**49.9**	5.2	10.9	**8.8**	11.0	13.4	10.4	55.5	9.7
30.3	38.6	**35.7**	36.0	41.6	**38.6**	0.6	0.9	**0.7**	14.4	3.9	38.8	42.2	0.7
2.4	14.5	**6.3**	45.5	63.3	**58.0**	6.5	8.0	**7.3**	7.4	12.9	7.0	64.6	8.1
2.4	5.7	**4.1**	36.3	52.7	**41.9**	5.7	8.1	**7.1**	5.5	33.3	4.6	48.5	8.1
1.3	10.1	**5.6**	15.7	38.7	**23.6**	8.8	18.0	**13.1**	7.8	40.1	6.1	25.8	14.2
35.8	51.4	**44.4**	32.0	41.2	**36.6**	0.8	3.8	**2.0**	2.9	4.5	49.5	40.9	2.2
4.7	13.3	**8.9**	28.4	41.9	**35.4**	5.2	11.6	**7.9**	6.3	36.2	9.7	39.2	8.6
7.6	14.0	**9.5**	35.2	48.0	**38.4**	1.3	4.4	**3.0**	6.5	36.9	10.5	42.8	3.3
18.8	24.0	**21.4**	33.8	41.7	**38.9**	6.4	18.7	**13.3**	4.1	15.7	23.4	43.4	14.5
2.0	5.9	**3.9**	12.6	21.2	**16.2**	0.6	2.0	**1.3**	2.2	5.9	16.6	69.6	5.7

a Including fiber.

ANALYSES OF AMERICAN FEEDING STUFFS.

ANALYSES OF AMERICAN FEEDING STUFFS.

COLLATED BY E. H. JENKINS AND A. L. WINTON.

SYMBOLS USED IN THE FOLLOWING TABLES.—The significance of the letters which appear in the following table is as follows:
a Albuminoid nitrogen was determined; *b* nitrogen, phosphoric acid, and potash were determined; *c* the ash ingredients were determined; *d* starch was determined; *e* sugar was determined; *h* yield of fresh substance per acre is given in *loc. cit.*; *i* yield of dry substance per acre is given in *loc. cit.*; *j* yield of food ingredients per acre is given in *loc. cit.*; *k* water content is assumed.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER.													
	CEREAL GRASSES.													
	Corn (maize) fodder, flint varieties:	%	%	%	%	%	%	%	%	%	%	%		
1	Waushakum, cut Aug. 18; av. of 5 analyses; kernels just beginning to swell after fertilization.*	86.05	0.66	1.42	3.82	7.73	0.32	4.7	10.2	27.3	55.5	2.3	N. Y. State Ex. Sta. Rep., 1883, p. 154	1
2	Waushakum, cut Aug. 25; av. of 5 analyses	84.38	0.69	1.76	4.25	8.61	0.31	4.4	11.3	27.2	55.1	2.0	do	2
3	Waushakum, cut Sept. 1; av. of 5 analyses	81.81	0.79	1.92	4.44	10.68	0.36	4.3	10.6	24.4	58.8	1.9	do	3
4	Waushakum, cut Sept. 8; av. of 5 analyses	77.34	0.88	2.20	4.49	14.53	0.55	3.9	9.7	19.8	64.2	2.4	do	4
5	Waushakum, cut Sept. 15; av. of 5 analyses	75.01	0.89	2.37	4.80	16.27	0.65	3.5	9.5	19.2	65.2	2.6	do	5
6	Waushakum, cut Sept. 23; av. of 5 analyses	69.67	0.91	2.72	6.12	19.69	0.89	3.0	9.0	20.2	64.9	2.9	do	6
7	Waushakum, cut Aug. 19; av. of 5 analyses	79.59	0.72	1.70	4.77	12.69	0.53	3.5	8.3	23.4	62.2	2.6	N. Y. State Ex. Sta. Rep., 1884, p. 331	7
8	Waushakum, cut Aug. 20; av. of 5 analyses	80.62	0.68	1.54	5.09	11.46	0.61	3.5	7.9	26.3	59.2	3.1	do	8
9	Waushakum	71.50	1.13	2.49	4.77	19.49	0.65	4.0	8.7	16.7	68.3	2.3	Minn. Ex. Sta. Bul. 2, 1888, p. 12	9
10	Waushakum, well-manured land; rows 3 feet apart; stalks 8½ inches apart; cut for silage when past the milk. *h*	83.05	1.37	1.64	2.93	10.35	0.66	8.1	9.7	17.3	61.1	2.8	Minn. Ex. Sta. Bul. 7, 1889	10
11	Clark, cut July 22; plants 3 to 4 feet high	88.61	0.97	1.96	2.96	5.13	0.37	8.5	17.2	26.0	45.1	3.2	Mass. State Ex. Sta. Rep., 1885, p. 52	11
12	Clark, cut July 29	85.76	1.14	2.05	3.89	6.78	0.38	8.0	14.4	27.3	47.6	2.7	do	12
13	Clark, cut Aug. 5; tasseled	84.64	0.91	1.82	4.06	8.22	0.35	5.9	11.8	26.4	53.6	2.3	do	13
14	Clark, cut Aug. 13	82.08	1.02	2.01	4.32	10.19	0.38	5.7	11.2	24.1	56.9	2.1	do	14
15	Clark, cut Aug. 27	81.15	0.89	1.67	4.58	11.37	0.34	4.7	8.9	24.3	60.3	1.8	do	15
16	Clark, cut Sept. 3; kernels beginning to glaze	76.81	0.98	2.13	4.85	14.62	0.61	4.2	9.2	20.9	63.1	2.6	do	16
17	Clark, unfertilized plats													
18	Clark, unfertilized plats	78.50	0.84	2.96	5.53	11.54	0.63	3.9	13.8	25.7	53.7	2.9	Mass. State Ex. Sta. Rep., 1885, p. 48	17
19	Clark *c*	70.27	1.56	2.48	7.28	17.40	1.01	5.2	8.4	24.5	58.5	3.4	Mass. State Ex. Sta. Rep., 1887, p. 93	18
20	Longfellow, well-manured land; rows 3 feet apart; stalks 8½ inches apart; cut in early milk. *h*	76.80	1.05	2.04	3.67	15.92	0.52	4.5	8.8	15.8	68.7	2.2	Minn. Ex. Sta. Bul. 2, 1888, p. 12	19
		84.64	1.13	1.51	3.16	9.05	0.51	7.4	9.8	20.6	58.9	3.3	Minn. Ex. Sta. Bul. 7, 1889	20
21	Canada *h*	51.50	1.57	4.03	5.44	36.31	1.15	3.2	8.3	11.2	74.9	2.4	Minn. Ex. Sta. Bul. 2, p. 12	21

22	New England pop; cut Aug. 20	87.43	0.86	0.94	4.47	6.16	0.34	5.2	7.5	35.5	49.1	2.7	N. Y. State Ex. Sta. Rep., 1884, p. 331	22
23	White Canadian, well-manured land; rows 3 feet apart; stalks 15 inches apart; cut in dough. *h*	82.63	1.25	1.75	2.92	10.45	1.00	7.1	10.1	16.8	60.2	5.8	Minn. Ex. Sta. Bul. 7, 1889	23
24	Mercer, well-manured land; rows 3 feet apart; stalks 12 inches apart; cut when past dough. *h*	79.34	1.30	1.76	4.08	12.68	0.84	6.3	8.5	19.8	61.3	4.1	do	24
25	Compton Early, well-manured land; rows 3 feet apart; stalks 10 inches apart; cut in dough. *h*	84.95	1.12	1.40	3.04	8.93	0.56	7.5	9.3	20.1	59.3	3.8	do	25
26	Smut Nose, well-manured land; rows 3 feet apart; stalks 7½ inches apart; cut ripe for silage. *h*	83.72	1.34	1.45	2.76	9.94	0.79	8.2	8.9	17.0	61.0	4.9	do	26
27	Squaw corn; well-manured land; rows 3 feet apart; stalks 7½ inches apart; cut ripe for ears. *h*	77.16	1.25	2.07	3.57	14.86	1.09	5.5	9.1	15.6	65.1	4.7	do	27
28	Angel of Midnight, well-manured land; rows 3 feet apart; stalks 7 inches apart; cut ripe for ears. *h*	83.54	1.00	1.52	2.99	10.10	0.65	6.0	9.1	18.0	62.9	4.0	do	28
29	Early Canada, well-manured land; rows 3 feet apart; stalks 7½ inches apart; cut ripe for ears. *h*	78.33	1.55	2.06	4.23	13.07	0.76	7.1	9.5	19.5	60.4	3.5	do	29
30	King Philip	63.20	1.37	3.27	4.73	26.60	0.83	3.8	8.9	12.8	72.2	2.3	Minn. Ex. Sta. Bul. 2, 1888, p. 12	30
31	Fodder	70.75	1.79	2.45	11.40	12.74	0.87	6.1	8.4	39.0	43.5	3.9	N. Y. State Ex. Sta. Rep., 1886, p. 365	31
32	White Australian (for analysis of silage from this corn see No. 618).	80.01	1.09	0.56	4.56	13.35	0.43	5.4	2.8	22.8	66.8	2.2	Rep. of Expts. at Univ. Wis., 1882, p. 85.	32
33	Sanford, frosted, cut next day	85.77	0.93	1.44	3.14	8.12	0.60	6.5	10.1	22.1	57.1	4.2	Vt. Ex. Sta. Rep., 1888, p. 74	33
34	Sanford, frosted, cut 5 days after being badly frosted.	84.07	0.81	1.40	3.98	9.16	0.58	5.1	8.8	25.1	57.4	3.6	do	34
35	Sanford, frosted, cut after a heavy frost	84.97	1.03	1.69	3.77	7.88	0.66	6.9	11.2	25.1	52.4	4.4	do	35
36	Sanford, cut July 26 *b*	90.85	0.75	1.42	2.06	4.31	0.61	8.2	15.6	22.5	47.0	6.7	N. H. Ex. Sta. Bul. No. 3, 1888	36
37	Sanford, cut Aug. 5 *b*	86.79	0.90	1.63	3.06	6.88	0.73	7.3	12.4	23.1	51.7	5.5	do	37
38	Sanford, cut Aug. 19 *b*	86.75	0.73	1.49	3.28	7.27	0.57	5.5	11.3	24.1	54.8	4.3	do	38
39	Sanford, cut Sept. 16 *b*	77.20	0.93	2.11	4.81	13.85	1.08	4.1	9.3	21.1	60.8	4.7	do	39
40	Northern field, cut July 26 *b*	87.75	1.07	1.79	2.99	5.58	0.82	8.8	14.6	24.4	45.5	6.7	do	40
41	Northern field, cut Aug. 5 *b*	86.10	0.66	1.88	3.25	7.51	0.62	4.7	13.4	23.4	54.1	4.4	do	41
42	Northern field, cut Aug. 19 *b*	81.45	1.02	1.89	4.56	10.48	0.59	5.5	10.2	24.6	56.5	3.2	do	42
43	Northern field, cut Sept. 16 *b*	72.40	1.69	2.65	4.79	17.17	1.30	6.1	9.6	17.4	62.2	4.7	do	43
	All analyses, excluding Nos. 33–35. Maximum	90.85	1.79	4.03	11.40	36.31	1.30	8.8	17.2	39.0	72.3	6.7		
	Minimum	51.50	0.66	0.56	2.06	4.31	0.31	3.0	2.8	14.2	43.5	1.8		
	Average	**79.76**	**1.05**	**1.96**	**4.32**	**12.26**	**0.65**	**5.2**	**9.7**	**21.3**	**60.6**	**3.2**		
	Mature corn fodder, cut after the kernels were glazed, or after September 7.† Maximum	83.72	1.69	2.72	6.12	19.69	1.30	8.2	9.7	21.1	65.2	4.9		
	Minimum	69.67	0.88	1.45	2.99	9.94	0.55	3.0	8.9	15.6	60.4	2.4		
	Average	**77.12**	**1.14**	**2.13**	**4.34**	**14.43**	**0.84**	**5.0**	**9.2**	**18.9**	**63.2**	**3.7**		

* The separate analyses are given in *loc. cit.*, together with height and weight of stalk.

† Nos. 4, 5, 6, 26, 27, 28, 29, 39, and 43.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	CEREAL GRASSES—continued.													
	Corn (maize) fodder, dent varieties:	%	%	%	%	%	%	%	%	%	%	%		
44	Southern White, cut Aug. 23, when tassels began to appear; thin sown. *h*	88.09	0.78	1.06	3.83	6.06	0.18	6.6	8.9	32.2	50.9	1.4	Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 36.	44
45	Southern White, cut Aug. 23, when tassels began to appear; thick sown. *h*	93.60	0.55	0.54	2.22	3.01	0.08	8.6	8.4	34.7	47.0	1.3	do	45
46	Southern White, cut Sept. 7; thick sown *h*	63.53	2.54	3.79	11.00	18.78	0.36	6.9	10.4	30.2	51.5	1.0	do	46
47	Green fodder corn	74.85	1.46	1.25	6.35	15.67	0.42	5.8	5.0	25.2	62.3	1.7	N. J. Ex. Sta. Rep., 1881, p. 52	47
48	Do	71.10	1.35	1.56	7.88	17.69	0.42	4.7	5.4	27.3	61.1	1.5	do	48
49	Do	75.04	1.51	1.75	9.78	11.37	0.55	6.0	7.0	39.2	45.6	2.2	do	49
50	Do	74.43	1.65	1.72	6.32	15.65	0.23	6.5	6.7	24.7	61.2	0.9	N. J. Ex. Sta. Rep., 1882, p. 71	50
51	Do	73.12	1.70	1.70	6.56	16.63	0.29	6.3	6.3	24.4	61.9	1.1	do	51
52	Green field corn, planted in hills as for crop of ears. Analysis No. 614 is silage made from this crop.	79.72	1.07	1.78	4.73	12.46	0.24	5.3	8.8	23.3	61.4	1.2	Conn. State Ex. Sta. Rep., 1882, p. 100	52
53	Green fodder corn, thickly planted in drills. Analysis No. 615 is silage made from this crop.	87.15	0.87	1.54	4.19	6.06	0.19	6.8	11.9	32.6	47.2	1.5	do	53
54	Yellow dent. Analysis No. 619 is silage made from this crop.	84.95	0.78	1.15	3.29	9.32	0.51	5.2	7.6	21.9	61.9	3.4	Rep. of Expts. at Univ., Wis., 1882, p. 85.	54
55	Green fodder corn	71.51	1.42	1.45	6.77	18.50	0.35	5.0	5.1	23.8	64.9	1.2	N. J. Ex. Sta. Rep., 1883, p. 75	55
56	Do	69.11	1.56	1.59	8.12	19.30	0.32	5.1	5.1	26.3	62.5	1.0	do	56
57	Silage corn, Southern White	80.00	1.10	1.21	6.49	10.71	0.49	5.5	6.0	32.5	53.5	2.5	N. Y. State Ex. Sta. Rep., 1884, p. 330	57
58	Minnesota, cut Aug. 21, 1884	82.21	0.84	1.83	6.37	8.32	0.43	4.7	10.3	35.8	46.8	2.4	do	58
59	Husk corn, cut Aug. 22, 1883	82.15	1.09	1.45	5.59	9.20	0.52	6.1	8.1	31.3	51.6	2.9	do	59
60	Husk corn, cut Aug. 9	81.97	0.87	1.52	5.34	9.49	0.81	4.8	8.4	29.6	52.6	4.5	do	60
61	Silage corn, Southern White, cut Sept. 5	81.46	1.16	1.02	5.93	9.73	0.70	6.3	5.5	32.0	52.5	3.7	do	61
62	Green corn	86.71	1.55	2.15	3.50	5.84	0.25	11.7	16.2	26.3	43.9	1.9	N. J. Ex. Sta. Rep., 1884, p. 106	62
63	Do	80.91	1.35	2.15	5.00	10.20	0.39	7.1	11.3	26.2	53.4	2.0	do	63
64	Do	77.76	1.45	1.76	5.78	12.85	0.40	6.5	7.9	26.0	57.8	1.8	do	64
65	Do	73.79	1.43	1.86	6.20	16.28	0.44	5.5	7.1	23.7	62.0	1.7	do	65
66	Green corn, cut Aug. 2; height 5 ft.; drills 3 ft. apart. *a h*	89.36	1.19	0.89	3.45	4.89	0.22	11.2	8.4	32.5	45.9	2.0	Penn. Ex. Sta. Rep., 1887, p. 124	66
67	Green corn, cut Aug 23; height 6 ft.; drills 3 ft. apart. *a h*	83.61	1.16	0.96	5.54	8.41	0.32	7.1	5.9	33.8	53.3	1.9	do	67
68	Groen corn, cut Sept. 13; mature; drills 3 ft. apart. *a h*	80.65	1.03	0.98	5.35	11.63	0.36	5.4	5.1	27.7	60.0	1.8	do	68

69	Green corn, sown later and more manure used than in the last 3 samples; height 6 ft.; drills 3 ft. apart. *a h*	85.25	1.01	1.29	4.46	7.63	0.36	6.8	8.8	30.2	51.7	2.5	do	69
70	Minnesota White	73.90	0.88	1.99	4.99	17.76	0.48	3.4	7.6	19.1	68.1	1.8	Minn. Ex. Sta. Bul. 2, 1888	70
71	Minnesota Yellow	62.90	1.09	2.89	10.41	22.08	0.63	2.9	7.8	28.1	59.5	1.7	do	71
72	Dakota Dent	71.50	0.84	2.53	4.20	20.25	0.68	2.9	8.9	14.7	71.1	2.4	do	72
73	Pride of the North	73.10	1.00	1.99	4.91	18.56	0.44	3.7	7.4	18.3	69.0	1.6	do	73
74	Leaming	78.20	0.82	1.72	4.36	14.54	0.36	3.8	7.9	20.0	66.6	1.7	do	74
75	Smedley	78.10	0.72	1.77	4.20	14.85	0.36	3.3	8.1	19.2	67.8	1.6	do	75
76	Sheep-Tooth	86.60	0.48	1.05	3.67	8.04	0.16	3.5	7.8	27.4	60.1	1.2	do	76
77	Southern Ensilage No. 1	83.40	0.61	1.20	3.76	10.89	0.14	3.6	7.2	22.7	65.7	0.8	do	77
78	Southern Ensilage No. 2 *b h i j*	79.40	1.25	1.44	5.46	12.29	0.10	6.1	7.0	26.5	59.6	0.8	do	78
79	Southern Ensilage, cut Sept. 16 *b h i j*	75.40	1.13	2.36	5.95	14.58	0.58	4.6	9.6	24.2	59.3	2.3	N. H. Ex. Sta. Bul. 1, 1888	79
80	Pride of the North, cut Sept. 16	70.45	1.77	3.25	6.04	16.90	1.50	6.0	11.0	20.4	57.2	5.4	do	80
81	Pride of the North, well matured *a h*	71.00	2.22	2.49	7.82	15.98	0.49	7.7	8.6	26.9	55.1	1.7	Wis. Ex. Sta. Rep., 1888, pp. 8 and 85	81
82	Burrill & Whitman Southern Ensilage; planted 6 to 8 inches apart; drills 3 feet 10 inches apart; cut Aug. 15; stalks in tassel, but ears just coming into milk. *a*	82.30	1.59	1.81	6.80	7.22	0.28	9.0	10.2	38.4	40.8	1.6	do	82
83	Burrill & Whitman Southern Ensilage, cut Aug. 31.	74.31	1.39	1.76	6.60	15.22	0.72	5.4	6.8	25.7	59.3	2.8	do	83
84	Breck Ensilage corn; rows 3 feet apart; drilled 20 quarts seed per acre; cut when glazed. *a h i j*	78.75	1.21	1.07	7.62	10.14	1.21	5.7	5.0	35.9	47.7	5.7	Md. Ex. Sta. Bul. 3, 1888	84
85	Breck Ensilage corn; rows 18 inches apart; drilled 36 quarts seed per acre; cut before glazing. *a h i j*	80.18	0.94	1.02	6.22	10.54	1.10	4.7	5.1	31.4	53.2	5.6	do	85
86	Breck Ensilage corn; rows 9 inches apart; drilled 52 quarts seed per acre; cut before glazing. *a h i j*	79.67	1.04	1.13	7.20	9.87	1.09	5.1	5.6	35.4	48.5	5.4	do	86
87	Breck Ensilage corn; broadcast; drilled 52 quarts seed per acre; cut before glazing. *a h i j*	77.93	1.09	1.83	7.85	10.48	0.82	4.9	8.3	35.6	47.5	3.7	do	87
88	Rose Dent, well-manured land; rows 3 feet apart; stalks 2 to the foot; cut in milk. *h*	78.50	1.53	1.67	3.51	14.01	0.78	7.1	7.8	16.3	65.2	3.6	Minn. Ex. Sta. Bul. 7, 1889	88
89	Burr White Dent; rows 3 feet 8 inches apart; 1 to 3 kernels every 8 inches; kernels glazed; leaves dry at bottom. *a h*	59.54	1.76	1.93	8.46	27.04	1.27	4.5	4.2	24.6	63.9	2.8	Ill. Ex. Sta. Bul. 4, 1889	89
90	Burrill & Whitman Ensilage; rows 3 feet 8 inches apart; 1 kernel every 3 inches; kernels in milk; leaves green. *a h*	72.66	1.22	1.47	6.44	17.36	0.85	4.4	4.8	24.5	63.3	3.0	do	90
91	Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Aug. 25. *a*	82.75	2.12	2.75	8.49	3.27	0.62	7.8	10.1	31.1	48.7	2.3	Mich. Ex. Sta., Bul. 49, 1889	91
92	Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Sept. 3. *a*	78.30	1.34	2.36	5.91	11.54	0.55	6.2	10.9	27.2	53.2	2.5	do	92
93	Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Sept. 10. *a*	78.02	1.23	2.02	6.26	12.00	0.47	5.6	9.2	28.5	54.6	2.1	do	93

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	CEREAL GRASSES—continued.													
	Corn (maize) fodder, dent varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
94	Burrill & Whitman Ensilage; rows 3 feet 9 inches apart; stalks 10 inches apart; cut Sept. 13. *a*	78.04	1.03	1.82	5.87	12.74	0.50	4.6	8.3	26.8	58.1	2.2	Mich. Ex. Sta. Bul. 49, 1889	94
95	Hathaway Dent; ears glazing; cut Sept. 3 to 5. *a*	73.56	0.84	2.28	5.14	17.59	0.55	3.2	8.6	19.5	66.6	2.1	do	95
96	Parish White Dent, cut Sept. 3 to 5 *a*	75.54	1.54	1.87	6.17	14.50	0.38	6.3	7.6	25.2	59.2	1.7	do	96
97	Leaming, cut Sept. 3 to 5 *a*	76.77	1.35	1.53	5.64	14.36	0.35	5.9	6.5	24.3	61.7	1.6	do	97
98	Burrill & Whitman Ensilage, cut Aug. 25; wilted for 2 days. *a*	88.00	0.78	1.07	3.34	6.51	0.30	6.5	8.9	27.9	54.2	2.5	do	98
99	Burrill & Whitman Ensilage, cut Sept. 1; wilted for 2 days. *a*	72.40	1.65	2.54	7.93	14.84	0.64	6.0	9.2	28.7	53.8	2.3	do	99
100	Burrill & Whitman Ensilage, cut Sept. 8; wilted for 2 days. *a*	73.00	1.50	2.42	7.72	14.75	0.61	5.5	9.0	28.6	54.6	2.3	do	100
101	Leaming, cut Oct. 1, after heavy frost	85.15	1.35	1.85	4.02	7.09	0.54	9.1	12.5	27.1	47.7	3.6	Vt. Ex. Sta. Rep., 1888, p. 74	101
102	Red Cob Ensilage, cut Oct. 1, after heavy frost.	86.23	0.98	1.63	4.42	6.24	0.50	7.1	11.8	32.1	45.3	3.7	do	102
103	Southern White, cut Oct. 2, after being frozen.	84.28	1.23	1.19	3.74	9.01	0.55	7.8	7.6	23.8	57.3	3.5	do	103
104	Southern Ensilage, cut July 26 *b h i j*	91.25	0.79	1.60	2.03	3.99	0.34	9.0	18.2	23.2	45.7	3.9	N. H. Ex. Sta. Bul. 3, 1888	104
105	Southern Ensilage, cut Aug. 5 *b h i j*	89.19	0.93	1.52	3.05	4.81	0.51	8.6	14.1	28.2	44.4	4.7	do	105
106	Southern Ensilage, cut Aug. 19 *b h i j*	84.95	1.04	2.25	3.90	7.11	0.75	6.9	15.0	25.9	47.2	5.0	do	106
107	Pride of the North, cut July 26 *b h i j*	90.65	0.99	1.63	2.29	4.00	0.44	10.6	17.5	24.6	42.6	4.7	do	107
108	Pride of the North, cut Aug. 5 *b h i j*	87.56	1.02	1.97	3.35	5.55	0.56	8.2	15.8	26.9	44.6	4.5	do	108
109	Pride of the North, cut Aug. 19 *b h i j*	82.25	0.90	1.92	3.97	10.27	0.67	5.1	10.8	22.3	57.9	3.9	do	109
110	Immature, cut for soiling *a*	90.04	1.22	1.72	2.70	3.92	0.40	12.3	17.3	27.1	39.4	3.9	Pa. Ex. Sta. Rep., 1888, p. 89	110
	Dent varieties, excluding Nos. 98–103. Maximum	93.60	2.54	3.79	11.00	27.04	1.59	12.3	18.2	39.2	69.0	5.7		
	Dent varieties, excluding Nos. 98–103. Minimum	59.54	0.55	0.54	2.03	3.01	0.08	2.9	4.2	14.7	39.4	0.8		
	Dent varieties, excluding Nos. 98–103. Average	**78.99**	**1.20**	**1.73**	**5.59**	**11.98**	**0.51**	**5.7**	**8.3**	**26.3**	**57.1**	**2.6**		
	Dent varieties, cut when glazed or more mature; 7 analyses.† Maximum	80.65	2.22	3.25	8.46	27.04	1.59	7.7	11.0	35.9	63.9	5.7		
	Dent varieties, cut when glazed or more mature; 7 analyses.† Minimum	59.54	1.03	0.98	5.35	11.63	0.36	4.5	4.2	20.4	47.7	1.7		
	Dent varieties, cut when glazed or more mature; 7 analyses.† Average	**73.40**	**1.45**	**1.99**	**6.70**	**15.60**	**0.86**	**5.4**	**7.5**	**25.2**	**58.7**	**3.2**		

111	Corn (maize) fodder, sweet varieties:													
	Medium or large variety, planted June 1; hills 2½ feet apart, rows 3 feet apart; cut July 25, before tassels appeared.*	92.91	0.98	0.87	1.90	3.20	0.14	13.8	12.2	26.8	45.2	2.0	Conn. State Ex. Sta. Rep., 1878, p. 60	111
112	Medium or large variety, planted June 1; hills 2½ feet apart, rows 3 feet apart; cut Aug. 9, in full silk.*	88.29	1.27	1.31	3.23	5.73	0.17	10.8	11.2	27.5	49.1	1.4	do	112
113	Medium or large variety, planted June 1; hills 2½ feet apart, rows 3 feet apart; cut Aug. 25; kernels full size for eating as green corn.*	90.48	1.10	0.87	2.69	4.72	0.14	11.5	9.1	28.3	49.6	1.5	do	113
114	Medium or large variety, planted June 1; hills 2½ feet apart, rows 3 feet apart; cut Sept. 25; stalks and ears nearly dry.*	80.74	2.33	1.54	5.94	9.21	0.24	12.1	7.9	30.8	47.9	1.3	do	114
115	Stowell Evergreen, cut Aug. 20	80.48	1.00	1.72	6.14	10.14	0.52	5.1	8.8	31.4	52.0	2.7	N. Y. State Ex. Sta. Rep., 1884, p. 331	115
116	Narraganset	74.00	0.90	2.10	3.40	18.94	0.57	3.8	8.1	13.1	72.9	2.1	Minn. Ex. Sta. Bul. 2, 1888	116
117	Early Minnesota	76.20	0.94	2.11	3.65	16.54	0.56	3.9	8.9	15.3	69.5	2.4	do	117
118	Black Mexican	71.90	1.14	2.60	4.58	19.07	0.71	4.1	9.2	16.3	67.9	2.5	do	118
119	Crosby Early No. 1	73.90	0.92	2.23	3.89	18.55	0.51	3.5	8.5	14.9	71.1	2.0	do	119
120	Marblehead	69.30	1.82	2.74	5.72	19.64	0.78	5.9	8.9	18.6	64.1	2.5	do	120
121	Old Colony Sugar	70.30	0.94	1.86	3.81	13.60	0.49	4.5	9.0	18.4	65.8	2.3	do	121
122	Moore Concord	72.80	1.09	2.41	3.64	19.39	0.67	4.0	8.9	13.4	71.2	2.5	do	122
123	Stowell Evergreen	80.80	0.76	1.52	3.68	13.12	0.12	4.0	7.9	19.2	68.3	0.6	do	123
124	Mammoth Sugar	83.40	0.75	1.37	2.02	12.09	0.37	4.5	8.3	12.2	72.8	2.2	do	124
125	Early Minnesota No. 2	78.10	0.98	1.92	3.47	15.03	0.50	4.5	8.8	15.8	68.6	2.3	do	125
126	Crosby Early No. 2	78.90	1.22	1.94	3.69	13.69	0.56	5.8	9.2	17.5	64.9	2.6	do	126
127	Perry Hybrid	79.80	0.98	1.76	3.68	13.33	0.45	4.8	8.7	18.2	66.1	2.2	do	127
128	Stowell Evergreen (large sweet), rows 3 feet 10 inches apart; stalks 4 feet 6 inches apart; when cut ears had set. *h j*	77.35	2.04	2.12	7.67	10.37	0.45	9.0	9.4	33.9	45.7	2.0	Wis. Ex. Sta. Rep., 1888, p. 9	128
129	Stowell Evergreen (large sweet), cut Aug. 15. *a*	80.19	1.77	2.04	6.81	8.85	0.34	8.9	10.3	34.4	44.7	1.7	Wis. Ex. Sta. Rep., 1888, p. 85	129
130	Stowell Evergreen (large sweet), cut Aug. 18 *a*	74.25	2.35	2.16	8.52	12.14	0.58	9.2	8.4	33.4	46.7	2.3	do	130
131	Stowell Evergreen (large sweet), cut Aug. 18; same crop as No. 130, but left shocked in field one week; partly cured. *a*	66.44	2.58	2.74	11.53	16.02	0.69	7.7	8.2	34.4	47.7	2.0	do	131
132	Variety unknown	77.51	1.12	1.75	4.58	14.03	1.01	5.0	7.8	20.4	62.3	4.5	Mo. Ex. Sta. Bul. 7, 1889	132
133	Stowell Evergreen, cut Oct. 1, after heavy frost.	85.66	1.41	1.52	3.45	7.42	0.60	9.8	10.6	23.9	51.5	4.2	Vt. Ex. Sta. Rep., 1888, p. 74	133
	Sweet varieties, excluding Nos. 131–133. Maximum	92.91	2.58	2.74	8.52	19.39	1.01	13.8	12.2	34.4	72.9	2.7		
	Sweet varieties, excluding Nos. 131–133. Minimum	69.30	0.75	0.87	1.90	3.20	0.14	3.5	7.8	13.1	44.7	0.6		
	Sweet varieties, excluding Nos. 131–133. Average	**79.08**	**1.26**	**1.86**	**4.42**	**12.92**	**0.46**	**6.0**	**8.9**	**21.2**	**61.7**	**2.2**		
	Corn (maize) fodder, unclassified varieties:													
134	Fodder *a*	80.24	0.85	2.07	5.69	10.56	0.59	4.3	10.5	28.8	53.9	2.5	N. Y. State Ex. Sta. Rep., 1888, p. 237	134
135	Fresh corn	87.15	0.87	1.54	4.19	6.06	0.19	6.8	12.0	32.6	47.1	1.5	Ala. College Ex. Sta. Bul. 3, 1884	135
136	Dent and flint mixed, cut Aug. 22; partly cured. *a*	65.65	2.72	3.01	11.74	16.38	0.50	7.9	8.8	34.2	47.7	1.4	Wis. Ex. Sta. Rep., 1888, p. 85	136

* On page 62, *loc. cit.*, are determinations of nitrogen as nitrates in the crop.

† Nos. 68, 79, 80, 81, 84, 89, 94.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	CEREAL GRASSES—continued.													
	Corn (maize) fodder, unclassified varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
137	Field corn	75.06	1.22	2.13	6.73	14.21	0.65	4.9	8.5	27.0	57.0	2.6	Mo. Ex. Sta. Bul. 7, 1889	137
138	Fodder	83.31	1.31	1.19	4.67	9.05	0.47	7.9	7.1	27.9	54.3	2.8	Miss. Ex. Sta. Bul. 8, 1889	138
139	Slightly frosted *a*	86.00	0.78	1.04	3.78	7.66	0.74	5.5	7.4	27.0	54.8	5.3	Md. Ex. Sta. Rep., 1888, p. 69	139
140	Severely frosted *a*	77.53	1.18	1.19	7.03	12.37	0.70	5.3	5.3	31.8	54.5	3.1	do	140
141	Frosted *a*	76.90	1.27	1.59	6.10	13.06	1.08	5.5	6.9	26.4	56.6	4.6	do	141
	All varieties, 126 analyses of corn (maize) fodder. Maximum	93.60	2.58	4.03	11.40	36.31	1.59	13.8	18.2	39.2	72.9	6.7		
	Minimum	51.50	0.55	0.54	1.90	3.01	0.08	2.9	2.8	11.2	39.4	0.6		
	Average	**79.33**	**1.16**	**1.82**	**4.98**	**12.17**	**0.54**	**5.6**	**8.8**	**24.1**	**58.9**	**2.6**		
	Corn (maize) fodder, leaves and husks, dent varieties:													
142	Burrill & Whitman Ensilage; rows 3 feet 8 inches apart; 1 to 3 stalks every 8 inches; leaves 4 to 5 at bottom dry. *a*	65.11	2.86	2.36	8.38	19.94	1.33	8.2	6.8	24.0	57.2	3.8	Ill. Ex. Sta. Bul. 4, 1889	142
143	Burrill & Whitman Ensilage; rows 3 feet, 8 inches apart; 1 stalk every 4 inches; leaves green. *a*	70.73	2.18	1.80	7.26	17.09	0.95	7.5	5.9	24.9	58.5	3.2	do	143
144	Burr White Dent; rows 3 feet 8 inches apart; 1 to 3 stalks every 8 inches; leaves green. *a*	57.89	4.40	1.93	12.47	22.24	1.07	10.5	4.6	29.6	52.8	2.5	do	144
145	Burr White Dent; rows 3 feet 8 inches apart; 1 stalk every 6 inches; leaves green. *a*	71.34	2.05	2.26	6.59	16.74	1.02	7.2	7.9	23.0	58.4	3.5	do	145
146	Variety unknown, frost-bitten; gathered after becoming dry and whitened.	12.73	4.89	11.52	26.95	41.23	2.68	5.6	13.2	30.8	47.4	3.0	Vt. Ex. Sta. Rep., 1888, p. 74	146
147	Sanford, frost-bitten 5 days before gathering.	48.90	3.28	7.41	13.65	24.72	2.04	6.4	14.5	26.7	48.4	4.0	do	147
	All analyses, excluding Nos. 146 and 147. Maximum	71.34	4.40	2.36	12.47	22.24	1.33	10.5	7.9	29.6	58.5	3.8		
	Minimum	57.89	2.05	1.80	6.59	16.74	0.95	7.2	4.6	23.0	52.8	2.5		
	Average	**66.27**	**2.87**	**2.09**	**8.67**	**19.00**	**1.09**	**8.5**	**6.2**	**25.7**	**56.4**	**3.2**		

	Corn (maize) fodder, ears, dent varieties:													
148	Burrill & Whitman ensilage corn; rows 3 feet 8 inches apart; stalks 3 inches apart in row; kernels in milk. *a*	66.58	0.60	3.07	3.94	24.44	1.37	1.8	9.2	11.8	73.1	4.1	Ill. Ex. Sta. Bul. 4, 1889	148
149	Burr White Dent; rows 3 feet 8 inches apart; 1 to 3 stalks every 9 inches in row; kernels glazed. *a*	42.81	0.99	3.51	5.15	45.10	2.44	1.7	6.1	9.0	78.9	4.3	do	149
150	Breck Boston Market fodder, cut Sept. 3 to 5. *a*	71.78	0.93	2.40	6.92	17.46	0.49	3.3	8.5	24.6	61.9	1.7	Mich. Ex. Sta. Bul. 49, 1889	150
151	Whito dent fodder, cut Sept. 3 to 5 *a*	65.03	1.54	2.83	7.58	22.18	0.84	4.4	8.1	21.7	63.4	2.4	do	151
	Corn (maize) fodder, stripped stalks, dent varieties:													
152	Burrill & Whitman Ensilage corn; planted in rows 3 feet 8 inches apart; 1 to 3 kernels every 9 inches in the row; kernels in milk, some glazed; 4 or 5 leaves at bottom dry. *a*	77.01	0.70	0.60	6.92	14.16	0.60	3.1	2.6	30.1	61.6	2.6	Ill. Ex. Sta. Bul. 4. 1889	152
153	Burrill & Whitman Ensilage corn; planted in rows 3 feet 8 inches apart; 1 to 3 kernels every 9 inches in the row; kernels in milk; leaves green. *a*	77.36	0.59	0.40	6.84	14.31	0.50	2.6	1.8	30.2	63.3	2.2	do	153
154	Burr White Dent; rows 3 feet 8 inches apart; kernels 3 inches apart; kernels glazed; leaves 5 and 6 at bottom dry, others partly dry. *a*	74.45	0.84	0.62	8.84	14.82	0.43	3.3	2.4	34.6	58.0	1.7	do	154
155	Burr White Dent; rows 3 feet 8 inches apart; kernels 6 inches apart; kernels not fully in milk; leaves green. *a*	75.52	0.65	0.64	6.65	15.97	0.51	2.7	2.6	27.2	65.2	2.3	do	155
	Maximum	77.36	0.84	0.64	8.84	15.97	0.60	3.3	2.6	34.6	65.2	2.6		
	Minimum	74.45	0.59	0.40	6.65	14.16	0.43	2.6	1.8	27.2	58.0	1.7		
	Average	**76.08**	**0.69**	**0.56**	**7.31**	**14.85**	**0.51**	**2.9**	**2.3**	**30.7**	**62.0**	**2.1**		
	Sorghum, whole plant:													
156	Sorghum, Amber	75.04	0.69	1.03	5.81	17.03	0.40	2.8	4.1	23.3	68.2	1.6	N. Y. State Ex. Sta. Rep., 1884, p. 330	156
157	Do	85.92	0.73	1.06	6.56	5.34	0.39	5.2	7.6	46.6	37.8	2.8	do	157
158	Do	86.38	0.81	1.42	5.45	5.56	0.38	5.9	10.4	40.0	40.9	2.8	do	158
159	Sorghum *b*	71.50	1.08	0.95	6.95	19.34	0.18	3.8	3.3	24.3	68.0	0.6	N. J. Ex. Sta. Rep., 1884, p. 106	159
160	Sorghum, dried *b*	61.59	1.24	1.33	8.49	27.04	0.31	3.2	3.5	22.1	70.4	0.8	do	160
161	Sorghum	83.43	0.74	1.04	5.76	8.56	0.47	4.5	6.3	34.7	51.7	2.8	N. Y. State Ex. Sta. Rep., 1886, p. 365	161
162	Do	84.58	0.81	0.90	4.71	8.62	0.38	5.3	5.8	30.6	55.9	2.4	do	162
163	Sorghum, Amber	63.88	2.33	2.55	9.06	21.47	0.71	6.5	7.1	25.1	59.3	2.8	Mo. Ex. Sta. Bul. 7, 1889	163
164	Do	77.31	1.30	1.94	5.32	13.71	0.33	5.7	8.5	23.5	60.9	1.4	do	164
165	Sorghum *h*	83.81	1.39	1.04	5.50	7.98	0.28	8.4	6.3	34.0	49.6	1.7	Miss. Ex. Sta. Bul. 8, 1889	165
166	Sorghum, Chinese *a*	78.38	1.34	1.51	6.80	10.92	1.05	6.2	7.0	31.5	50.5	4.8	Md. Ex. Sta. Rep. 1888	166
167	Sorghum, Early Orange *a*	83.15	0.72	1.34	5.48	8.56	0.75	4.3	7.9	32.5	50.8	4.5	do	167
	All analyses, excluding No. 160. Maximum	86.38	2.33	2.55	9.06	21.47	1.05	8.4	10.4	46.6	68.2	4.8		
	All analyses, excluding No. 160. Minimum	63.88	0.69	0.90	4.71	5.34	0.18	2.8	3.3	22.1	37.8	0.6		
	All analyses, excluding No. 160. Average	**79.40**	**1.09**	**1.34**	**6.13**	**11.56**	**0.48**	**5.3**	**6.5**	**29.7**	**56.2**	**2.3**		

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	CEREAL GRASSES—continued.	%	%	%	%	%	%	%	%	%	%	%		
	Sorghum, stripped stalks:													
168	Early Amber	75.70	1.59	1.20	3.89	17.62		6.5	4.9	16.0	72.6		U. S. Dept. Agr. Rep., 1879, p. 57	168
169	Honduras	80.00	0.89	0.96	3.30	14.85		4.5	4.8	16.5	74.2		do	169
170	Kaffir corn, sown in drills *h*	76.13	1.75	3.22	6.16	11.96	0.78	7.3	13.5	25.8	50.1	3.3	Pa. Ex. Sta. Bul. 6, 1886	170
171	Chicken corn (*Sorghum vulgare*) *h**	73.02	1.89	2.45	8.98	11.00	0.80	.....	.....	.....	.....	.....	Miss. Ex. Sta. Bul. 8, 1889	171
172	Rye fodder *k*	74.71	1.60	3.00	13.35	6.70	0.64	6.3	11.9	52.8	26.5	2.5	N. J. Ex. Sta. Rep., 1881, p. 54	172
173	Do. *k*	74.71	1.70	2.31	14.17	6.52	0.59	6.7	9.1	56.1	25.8	2.3	do	173
174	Do. *k*	74.71	1.71	2.50	14.89	5.57	0.62	6.8	9.9	58.8	22.0	2.5	do	174
175	Do. *k*	74.71	2.35	2.44	14.26	5.52	0.72	9.3	9.6	56.5	21.8	2.8	do	175
176	Do. *k*	74.71	2.32	2.63	14.83	4.92	0.59	9.2	10.4	58.7	19.4	2.3	do	176
177	Do	78.13	1.61	2.77	4.92	12.37	0.20	7.4	12.6	22.5	56.6	0.9	N. J. Ex. Sta. Rep., 1883, p. 75	177
178	Do. *a h i j*	84.33	1.33	2.50	4.72	6.35	0.77	8.5	16.0	30.1	40.5	4.9	Pa. Ex. Sta. Bul. 5, 1888	178
	Maximum	84.33	2.35	3.00	14.89	12.37	0.77	9.3	16.0	58.8	56.6	4.9		
	Minimum	74.71	1.33	2.31	4.72	4.92	0.20	6.3	9.1	22.5	19.4	0.9		
	Average	**76.57**	**1.80**	**2.60**	**11.59**	**6.85**	**0.59**	**7.7**	**11.1**	**49.5**	**29.2**	**2.5**		
	Oats fodder:													
179	Cut July 5, in bloom	78.61	1.58	1.52	7.08	10.78	0.43	7.4	7.1	33.1	50.4	2.0	Mass. State Ex. Sta. Rep., 1887, p. 94	179
180	Cut July 13	71.18	2.01	2.03	9.46	14.61	0.71	7.0	7.1	32.8	50.7	2.4	do	180
181	Cut July 5; height 3 feet 9 inches *a h i j*	74.13	1.52	2.67	7.85	12.87	0.96	5.9	10.3	30.4	49.7	3.7	Pa. Ex. Sta. Rep., 1887, p. 120	181
182	Grain in milk *a*	55.74	3.25	4.86	14.65	18.54	2.96	7.4	11.0	33.1	41.8	6.7	Md. Ex. Sta. Rep., 1888, p. 68	182
183	Grain in dough *a*	31.34	4.18	6.08	16.78	39.75	1.87	6.1	8.9	24.4	57.9	2.7	do	183
	Maximum	78.61	4.18	6.08	16.78	39.75	2.96	7.4	11.0	33.1	57.9	6.7		
	Minimum	31.34	1.52	1.52	7.08	10.78	0.43	5.9	7.1	24.4	41.8	2.0		
	Average	**62.20**	**2.51**	**3.43**	**11.16**	**19.32**	**1.38**	**6.6**	**9.1**	**29.5**	**51.1**	**3.7**		
	GRASSES.													
	Couch, quitch, or wheat grass (*Agropyrum repens*):													
184	Cut June 23 *a*	58.30	3.65	3.67	8.22	24.76	1.40	8.8	8.8	19.7	59.3	3.4	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128.	184
185	Time of cutting unknown	57.62	1.88	3.31	16.30	19.44	1.45	4.5	7.8	38.5	45.9	3.4	N. Y. State Ex. Sta. Rep., 1886, p. 365	185
	Redtop, hord's grass (of Pa.), bent grass (*Agrostis vulgaris*):													
186	Cut June 1; panicle not out; good soil *a*	67.80	2.64	4.25	6.75	17.35	1.21	8.2	13.2	21.0	53.8	3.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 133.	186

187	Cut June 1; panicle out; closed; good soil *a*.	68.10	2.34	4.34	6.66	17.27	1.29	7.3	13.6	20.0	54.1	4.1	do	187
188	Cut June 19; in early bloom; good soil *a*	70.10	2.25	3.81	6.47	16.29	1.08	7.6	12.7	21.6	54.5	3.6	do	188
189	Cut June 23; in full bloom; good soil *a*	61.40	2.80	4.25	8.50	21.94	1.11	7.3	11.0	22.0	56.8	2.9	do	189
190	Cut July 1; seed in milk; good soil *a*	53.30	3.08	4.88	9.07	28.03	1.64	6.6	10.4	19.4	60.1	3.5	do	190
191	Cut July 1; seed hard; good soil *a*	51.50	3.27	4.59	10.02	28.56	2.06	6.7	9.5	20.7	58.8	4.3	do	191
192	Cut July 9; seed mature; good soil *a*	57.00	2.28	3.82	9.35	26.37	1.18	5.3	8.9	21.7	01.4	2.7	do	192
193	Cut June 16; panicle spreading; poorer soil *a*	68.20	2.67	3.12	6.52	18.26	1.23	8.4	9.8	20.5	57.4	3.9	do	193
194	Cut June 18; in early bloom; poorer soil *a*	58.80	2.41	4.10	8.41	24.10	2.18	5.8	9.9	20.4	58.6	5.3	do	194
	Tall redtop (*Agrostis vulgaris*, var. *major*):													
195	Cut June 30, 1888; in full bloom *a b*	76.15	1.66	1.97	7.96	11.65	0.61	7.0	8.3	33.4	48.8	2.5	Conn. State Ex. Sta. Rep., 1888, p. 101	195
196	Cut June, 1889; grown on same soil as 195 *a b*	57.29	2.24	2.12	15.74	21.64	0.97	5.2	5.0	36.9	50.6	2.3	Conn. State Ex. Sta. Rep., 1889, p. 248	196
	Fine bent (*Agrostis vulgaris*, var. *minor*):													
197	Cut June 30, 1888; rather past bloom *a b*	71.56	1.93	2.77	9.34	13.04	0.76	6.8	9.7	32.8	48.0	2.7	Conn. State Ex. Sta. Rep., 1888, p 101	197
198	Cut June, 1889 *a b*; grown on same soil as 197	59.71	2.93	2.67	13.29	20.51	0.89	7.3	6.6	33.0	50.9	2.2	Conn. State Ex. Sta. Rep., 1889, p. 248	198
	Five analyses in bloom.† Maximum	76.15	2.80	4.25	15.74	24.10	2.18	7.6	12.7	36.9	58.6	5.3		
	Five analyses in bloom.† Minimum	57.29	1.66	1.97	6.47	11.65	0.61	5.2	5.0	20.4	48.8	2.3		
	Five analyses in bloom.† Average	**64.75**	**2.27**	**3.25**	**19.42**	**19.13**	**1.19**	**6.6**	**9.4**	**26.8**	**53.9**	**3.3**		
	Meadow foxtail (*Alopecurus pratensis*):													
199	Cut April 19; head just appearing *a*	77.10	2.11	3.60	4.17	11.94	1.08	9.2	15.7	18.2	52.2	4.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135.	199
200	Cut April 19; before bloom *a*	76.70	1.84	3.17	5.22	12.03	1.04	7.9	13.6	22.4	51.6	4.5	do	200
201	Cut May 1; in bloom *a*	60.00	3.10	4.32	9.51	21.73	1.34	7.8	10.8	23.8	54.2	3.4	do	201
202	Cut May 12; after bloom *a*	66.60	2.73	2.88	8.47	18.15	1.17	8.2	8.6	25.4	54.3	3.5	do	202
203	Time of cutting unknown	72.63	1.71	3.12	8.66	12.72	1.16	6.2	11.4	31.7	46.5	4.2	N. Y. State Ex. Sta. Rep., 1888, p. 237	203
	Sweet vernal grass (*Anthoxanthum odoratum*):													
204	Cut May 1; very young	76.90	1.47	2.45	3.97	14.22	0.99	6.4	10.6	17.2	61.5	4.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136.	204
205	Cut May 1; in full bloom	78.80	1.50	2.00	4.37	12.62	0.71	7.1	9.5	20.6	59.4	3.4	do	205
206	Cut June 19; after bloom	69.90	2.20	4.00	6.37	16.07	1.46	7.3	13.3	21.2	53.3	4.9	do	206
207	Cut July 19; after bloom	53.40	2.70	3.31	11.65	27.04	1.90	5.8	7.1	25.0	58.0	4.1	do	207
208	Time of cutting unknown	67.41	1.57	2.10	10.74	17.02	1.16	4.8	6.4	33.0	52.2	3.6	N. Y. State Ex. Sta. Rep., 1886, p. 365	208
209	Cut June 11, 1888; past bloom *a b*	75.13	1.46	2.89	7.73	11.95	0.84	5.9	11.6	31.1	48.1	3.3	Conn. State Ex. Sta. Rep., 1888, p. 101	209
210	Cut June 10, 1889 *a b*	74.41	1.55	2.29	7.68	13.10	0.97	6.1	8.9	30.0	51.2	3.8	Conn. State Ex. Sta. Rep., 1889, p. 248	210
	Tall oat grass, evergreen grass (*Arrhenatherum avenaceum*):													
211	Cut May 25; in full bloom *a*	62.30	2.99	3.31	9.17	20.71	1.52	7.9	8.8	24.3	60.0	4.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136.	211
212	Cut June 4, after bloom *a*	74.40	2.02	3.75	5.51	13.25	1.07	7.9	14.6	21.5	51.8	4.2	do	212
213	Time of cutting unknown	69.07	1.63	2.09	10.76	15.46	1.01	5.3	6.8	34.8	49.8	3.3	N. Y. State Ex. Sta. Rep., 1886, p. 365	213
214	Do	68.95	1.00	2.35	10.78	15.01	1.01	6.1	7.6	34.7	48.4	3.2	N. Y. State Ex. Sta. Rep., 1888, p. 237	214
215	Cut June 16, 1888; in full bloom *a b* grown on same soil	73.46	1.56	2.11	9.24	12.97	0.65	5.9	8.0	34.8	48.9	2.4	Conn. State Ex. Sta. Rep., 1888, p. 101	215
216	Cut June 10, 1889; in full bloom *a b* same soil	72.62	1.60	1.74	9.70	13.73	0.61	5.8	6.4	35.5	50.1	2.2	Conn. State Ex. Sta. Rep., 1889, p. 248	216
	Three analyses in full bloom.‡ Maximum	73.46	2.99	3.31	9.70	20.71	1.52	7.9	14.6	34.7	60.0	4.2		
	Three analyses in full bloom.‡ Minimum	62.30	1.56	1.74	9.17	12.97	0.61	5.8	6.4	21.5	48.4	2.2		
	Three analyses in full bloom.‡ Average	**69.46**	**2.05**	**2.38**	**9.37**	**15.82**	**0.92**	**6.7**	**7.8**	**30.7**	**51.8**	**3.0**		

* Adds 98.14.

† Nos. 188, 189, 194–196.

‡ Nos. 211, 215, 216.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	GRASSES—continued.													
	Yellow oat grass (*Avena flavescens*), grown on same soil:	%	%	%	%	%	%	%	%	%	%	%		
217	Cut June 16, 1888; in full bloom *a b*	66.70	1.38	2.55	11.39	17.20	0.78	4.1	7.7	34.2	51.7	2.3	Conn. State Ex. Sta. Rep., 1888, p. 101	217
218	Cut June 16, 1889; in full bloom *a b*	70.11	1.71	1.91	10.06	15.46	0.74	5.7	6.4	33.7	51.7	2.5	Conn. State Ex. Sta. Rep., 1889, p. 248	218
	Average	**68.40**	**1.54**	**2.23**	**10.73**	**16.34**	**0.76**	**4.9**	**7.1**	**33.9**	**51.7**	**3.4**		
	Erect brome grass (*Bromus erectus*):													
219	Cut Apr. 27; very young *a*	85.50	1.25	2.28	3.87	6.57	0.53	8.6	15.7	26.7	45.3	3.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135.	219
220	Cut May 8, before bloom *a*	74.30	1.86	3.14	6.49	13.37	0.84	7.2	12.2	25.3	52.0	3.3	do	220
221	Cut May 12, before bloom *a*	72.20	2.06	3.06	6.81	14.84	1.03	7.4	11.0	24.5	53.4	3.7	do	221
222	Cut May 19, early bloom *a*	63.70	2.79	3.19	8.90	20.40	1.02	7.7	8.8	24.5	56.2	2.8	do	222
	Schrader's grass, rescue grass (*Bromus unioloides*):													
223	Cut April 23; panicle not out *a*	80.60	2.07	3.31	3.60	9.45	0.97	10.7	17.1	18.6	48.6	5.0	do	223
224	Cut May 4; panicle closed *a*	75.40	2.20	3.53	5.47	12.55	0.85	8.9	14.3	22.2	51.1	3.5	do	224
225	Cut May 13, in full bloom *a*	79.40	1.91	2.60	4.67	10.60	0.82	9.3	12.6	22.7	51.4	4.0	do	225
226	Cut June 1, after bloom *a*	67.50	2.17	3.52	8.23	17.81	0.77	6.7	10.8	25.3	54.8	2.4	do	226
227	Cut June 1, in seed; brown *a*	64.70	3.02	3.45	7.01	21.08	0.74	8.6	9.8	19.9	59.6	2.1	do	227
	Orchard grass (*Dactylis glomerata*):													
228	Cut Apr. 23; panicle not out; earlier growth *a*	78.80	2.18	3.39	3.98	10.78	0.87	10.3	16.0	18.8	50.8	4.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 134.	228
229	Cut May 4; panicle closed; earlier growth *a*	79.30	1.71	2.15	4.80	11.40	0.64	8.3	10.4	23.2	55.0	3.1	do	229
230	Cut May 13; in full bloom; earlier growth *a*	77.30	1.83	2.16	5.77	12.20	0.74	8.1	9.5	25.4	53.8	3.2	do	230
231	Cut June 1; after bloom; earlier growth *a*	73.50	2.39	2.19	7.22	13.95	0.75	9.0	8.3	27.3	52.6	2.8	do	231
232	Cut June 18; in bloom; later growth *a*	66.90	2.86	4.14	8.16	16.62	1.32	8.6	12.5	24.7	52.2	4.0	do	232
233	Cut June 23; late bloom; later growth *a*	60.20	2.39	3.43	9.72	22.82	1.44	6.0	8.6	24.4	57.4	3.6	do	233
234	Cut July 1; seed nearly ripe; later growth *a*	62.30	2.54	2.75	9.46	21.69	1.26	6.7	7.3	25.1	57.6	3.3	do	234
235	Cut June 12; head not out; first year's growth. *a*	79.50	2.36	2.65	4.23	9.85	1.41	11.5	12.9	20.6	48.1	6.9	do	235
236	Cut July 15; green; first year's growth *a*	72.30	2.91	3.89	6.00	13.00	1.90	10.5	14.0	21.6	47.0	6.9	do	236
237	Cut July 15; yellow; first year's growth *a*	74.60	2.58	2.31	5.70	13.30	1.51	10.1	9.1	22.4	52.4	6.0	do	237
238	Cut Oct. 25; first year's growth *a*	68.70	3.43	4.17	6.65	15.02	2.03	11.0	13.3	21.2	48.0	6.5	do	238
239	Aftermath	76.25	2.60	2.97	7.60	9.23	1.35	10.9	12.2	32.0	39.2	5.7	N. Y. State Ex. Sta. Rep., 1885, p. 302	239

240	Cut 1886	65.00	1.99	2.58	12.54	16.73	1.16	5.7	7.4	35.8	47.8	3.3	N. Y. State Ex. Sta. Rep., 1886, p. 365	240
241	Cut 1887, grown on same soil as 240	73.19	1.84	2.40	10.54	10.87	1.14	6.9	8.9	39.4	40.5	4.3	N. Y. State Ex. Sta. Rep., 1887, p. 407	241
242	Aftermath	70.90	2.11	2.76	10.14	12.87	1.22	7.3	9.5	34.9	44.1	4.2	N. Y. State Ex. Sta. Rep., 1888, p. 237	242
243	Cut June 11, 1888; in full bloom *a b*	77.74	1.56	2.24	7.81	9.92	0.73	7.0	10.1	35.1	44.6	3.2	Conn. State Ex. Sta. Rep., 1888, p. 101	243
244	Cut June 10, 1889; in full bloom *a b*	69.86	1.75	1.92	11.11	14.55	0.81	5.8	6.4	36.9	48.2	2.7	Conn. State Ex. Sta. Rep., 1889, p. 248	244
	Four analyses in full bloom.* — Maximum	77.30	2.86	4.14	11.11	16.62	1.32	8.1	10.1	36.9	57.3	3.6		
	Four analyses in full bloom.* — Minimum	66.90	1.56	1.92	5.77	9.92	0.73	5.8	6.4	24.4	44.6	2.7		
	Four analyses in full bloom.* — Average	**72.95**	**2.00**	**2.61**	**8.21**	**13.33**	**0.90**	**7.4**	**9.6**	**30.4**	**49.3**	**3.3**		
	Sheep's fescue (*Festuca ovina*):													
245	Cut April 27, very young *a*	70.00	1.94	4.47	6.09	16.21	1.29	6.5	14.9	20.3	54.0	4.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136.	245
246	Cut May 8, before bloom *a*	65.40	1.87	3.03	8.69	19.76	1.25	5.4	8.8	25.1	57.1	3.6	do	246
247	Cut May 12, before bloom *a*	67.00	1.98	3.13	8.47	18.29	1.13	6.0	9.5	25.7	55.4	3.4	do	247
248	Cot May 21, in bloom *a*	53.70	2.59	4.58	11.02	26.95	1.18	5.6	9.9	23.8	58.2	2.5	do	248
249	Cut June 1, after bloom *a*	53.90	3.03	4.29	11.05	26.32	1.41	6.6	9.3	24.0	57.0	3.1	do	249
250	Cut May 21 *a*	67.00	1.85	3.26	7.85	19.21	0.83	5.6	9.9	23.8	58.2	2.5	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	250
251	Cut in bloom; grown under evergreens	71.85	1.85	2.91	9.98	12.68	0.73	6.6	10.3	35.5	45.0	2.6	Conn. State Ex. Sta. Rep., 1887, p. 103	251
252	Meadow fescue (*Festuca pratensis*)	68.70	1.97	2.44	10.93	14.82	1.14	6.3	7.8	34.9	47.4	3.6	N. Y. State Ex. Sta. Rep., 1886, p. 365	252
253	Cut June 20, in full bloom *a b*	69.89	1.81	2.73	10.53	14.24	0.80	6.0	9.1	35.0	47.3	2.6	Conn. State Ex. Sta. Rep., 1888, p. 101	253
254	Cut June 20, 1888, in full bloom	67.62	1.86	2.69	11.34	15.72	0.77	5.7	8.3	35.0	48.6	2.4	do	254
255	Cut June, 1889, in full bloom; grown on same soil as 254 *a b*.	73.18	1.58	1.84	10.19	12.55	0.66	5.9	6.9	38.0	46.7	2.5	Conn. State Ex. Sta. Rep., 1889, p. 248	255
	Maximum	73.18	1.97	2.86	11.34	15.72	1.14	6.3	9.1	38.0	48.6	3.6		
	Minimum	67.62	1.58	1.84	10.19	12.55	0.66	5.7	6.9	34.9	46.7	2.4		
	Average	**69.85**	**1.81**	**2.42**	**10.75**	**14.38**	**0.84**	**6.0**	**8.0**	**35.7**	**47.5**	**2.8**		
	Velvet grass, mesquite, soft grass (*Holcus lanatus*):													
256	Cut Apr. 2, very young *a*	82.30	1.77	2.19	3.30	9.64	0.81	10.0	12.4	18.6	54.5	4.5	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136.	256
257	Cut May 25, late bloom *a*	50.60	4.07	3.63	12.35	27.43	1.92	8.2	7.4	25.0	55.5	3.9	do	257
	English rye grass (*Lolium perenne*):													
258	Cut May 1, head invisible *a*	78.60	1.85	2.50	3.94	12.35	0.76	8.7	11.7	18.4	57.6	3.6	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 137.	258
259	Cut May 4, head invisible *a*	82.40	1.67	2.31	3.27	9.69	0.76	9.5	13.1	18.0	55.1	4.3	do	259
260	Cut May 4, head well out *a*	74.00	2.07	2.89	5.34	14.71	0.94	8.0	11.1	20.6	56.7	3.6	do	260
261	Cut May 12, before bloom *a*	76.40	1.98	2.12	5.65	12.96	0.89	8.4	9.0	23.9	55.0	3.7	do	261
262	Cut June 1, after bloom	63.10	2.77	2.81	9.38	20.97	0.97	7.5	7.6	25.4	56.9	2.6	do	262
	Italian rye grass (*Lolium perenne*, var. *italicum*):													
263	Cut Apr. 27, head invisible *a*	82.30	2.35	3.83	3.22	7.45	0.85	13.3	21.6	18.2	42.0	4.9	do	263
264	Cut May 21, head just out *a*	82.70	1.97	2.48	3.76	8.43	0.66	12.7	14.3	17.0	49.6	6.4	do	264
265	Cut May 26, in full bloom *a*	78.00	2.42	3.19	4.49	11.39	0.51	11.0	14.5	20.4	51.8	2.3	do	265

*Nos. 230, 232, 243, 244.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	GRASSES—continued.													
	Italian rye grass (*Lolium perenne*, var. *italicum*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
266	Cut June 4, after bloom *a*	71.50	2.50	3.30	6.23	15.34	1.13	8.8	11.6	21.9	53.7	4.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 137.	266
267	Cut June 2, head not out *a**	84.00	2.12	3.01	2.48	7.29	1.10	13.2	18.8	15.5	45.6	6.9	do	267
268	Cut June 12, head not out *a**	82.70	2.20	2.47	2.94	8.59	1.10	12.7	14.3	17.0	49.6	6.4	do	268
269	Cut June 19, head not out *a**	82.30	2.49	2.08	3.16	7.98	1.09	14.1	16.9	17.8	45.0	6.2	do	269
270	Cut July 10, head not out *a**	78.90	2.82	3.05	4.36	9.49	1.38	13.9	14.4	20.7	44.5	6.5	do	270
271	Cut October 25, head not out *a**	71.60	3.09	3.86	6.36	15.38	1.51	10.9	13.6	22.4	47.8	5.3	do	271
	Coming into bloom (fertilizers, pounds per acre)—													
272	300 sulphate of potash *a d e*	74.00	2.69	3.36	6.57	11.88	1.55	10.4	12.9	25.3	45.4	6.0	N. Y. State Ex. Sta. Rep., 1888, p. 252	272
273	150 sulphate of ammonia *a d e*	74.03	2.65	3.36	6.16	12.53	1.27	10.2	13.3	23.7	47.9	4.9	do	273
274	350 acid phosphate *a d e*	73.14	2.50	3.00	6.78	13.24	1.34	9.3	11.2	25.2	49.3	5.0	do	274
275	300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate. *a d e*	73.83	2.51	3.16	6.60	12.39	1.51	9.6	12.1	25.3	47.2	5.8	do	275
276	100 sulphate of potash, 350 acid phosphate *a*	72.51	2.53	2.94	6.94	13.73	1.35	9.2	10.7	26.5	49.7	4.9	do	276
277	100 sulphate of potash, 150 sulphate of ammonia. *a*	74.53	2.49	3.12	6.75	11.95	1.16	9.8	12.2	24.7	48.7	4.6	do	277
278	150 sulphate of ammonia, 350 acid phosphate *a*	73.15	2.48	3.00	6.62	13.37	1.38	9.2	11.2	24.7	49.8	5.1	do	278
279	350 lime, 150 sulphate of ammonia, 350 acid phosphate. *a*	74.26	2.44	3.14	6.72	12.00	1.44	9.5	12.2	24.0	48.7	5.6	do	279
280	350 lime, 150 sulphate of ammonia, 300 sulphate of potash. *a*	76.10	2.14	3.25	5.74	11.53	1.24	9.0	13.6	24.0	48.2	5.2	do	280
281	350 lime, 350 acid phosphate, 150 sulphate of ammonia, 300 sulphate of potash. *a*	75.92	2.22	3.14	5.53	11.93	1.26	9.2	13.1	22.9	49.6	5.2	do	281
282	350 lime, 150 sulphate of ammonia, 550 gypsum *a*	74.13	2.33	3.30	6.88	11.94	1.42	9.0	12.7	26.6	46.2	5.5	do	282
283	350 acid phosphate, 150 sulphate of ammonia, 550 gypsum, 300 sulphate of potash. *a*	75.03	2.40	2.84	6.43	12.18	1.12	9.6	11.4	25.7	48.8	4.5	do	283
284	350 lime *a*	74.39	2.13	3.22	6.15	12.84	1.27	8.3	12.6	23.9	50.2	5.0	do	284
285	550 gypsum *a*	69.55	2.48	3.77	7.28	15.42	1.50	8.2	12.4	23.8	50.7	4.9	do	285
286	Nothing *a*	71.53	2.44	2.90	7.00	14.82	1.31	8.5	10.2	24.6	52.1	4.6	do	286
287	100 sodium chloride *a*	73.41	2.58	2.84	6.79	13.24	1.14	9.7	10.7	25.6	49.7	4.3	do	287
288	180 nitrate of soda *a*	74.84	2.32	2.66	6.56	12.54	1.08	9.2	10.6	26.0	49.9	4.3	do	288
289	150 sulphate of ammonia *a*	76.61	2.11	2.57	5.87	11.72	1.12	9.0	11.0	25.1	50.1	4.8	do	289

290	150 muriate of potash *a*	71.51	2.35	3.05	7.02	14.61	1.48	8.3	10.7	24.8	51.3	5.1	do	290
291	300 sulphate of potash *a*	71.42	2.46	3.29	6.75	13.63	1.45	8.9	11.9	24.5	49.4	5.3	do	291
292	50 ferrous sulphate *a*	72.33	2.54	2.59	6.94	14.33	1.27	9.2	9.4	25.1	51.7	4.6	do	292
293	Barnyard manure *a*	70.65	2.75	2.66	7.53	15.10	1.38	9.4	9.1	25.7	51.1	4.7	do	293
294	Nothing *a*	70.02	2.70	2.62	8.34	14.82	1.50	8.7	8.7	25.1	52.5	5.0	do	294
295	Do. *a*	71.96	2.53	2.70	7.30	14.26	1.25	9.0	9.6	26.0	50.9	4.5	do	295
	Maximum	76.61	2.75	3.77	7.53	15.42	1.55	10.4	13.6	26.6	52.5	6.0		
	Minimum	69.55	2.11	2.57	5.53	11.53	1.08	8.2	8.7	22.9	45.4	4.8		
	Average	**73.16**	**2.46**	**3.06**	**6.72**	**13.27**	**1.33**	**9.2**	**11.4**	**25.1**	**49.8**	**5.0**		
	Crab grass, finger grass (*Panicum sanguinale*):													
296	Cut June 23	76.50	3.53	5.44	4.47	8.93	1.13	15.0	23.1	19.0	38.1	4.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	296
297	Time of cutting unknown	75.99	2.26	2.91	7.49	10.66	0.69	9.4	12.1	31.2	44.1	2.9	N. C. Ex. Sta. Rep., 1888, p. 131	297
	Texas millet (*Panicum texanum*):													
298	First cut, June 19, before bloom *a h i j*	83.82	2.40	2.48	3.10	7.60	0.60	14.8	15.3	19.2	47.0	3.7	S. C. Ex. Sta. Rep., 1882, p. 131	298
299	Second cut, July 2, in full bloom *a h i j*	81.61	1.74	1.35	3.89	10.94	0.47	9.5	7.4	21.1	59.4	2.6	do	299
	Timothy, herd's grass (of New England and New York) (*Phleum pratense*):													
300	Cut when well headed out *h* †	61.72	1.80	3.66	12.65	19.42	0.75	4.7	9.6	33.0	50.8	1.9	Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 31.	300
301	Cut when in full bloom *h* †	66.83	1.44	2.36	11.04	17.68	0.65	4.4	7.1	32.3	53.2	2.0	do	301
302	Cut when out of bloom *h* †	59.89	1.67	2.83	13.55	21.36	0.70	4.2	7.1	33.8	53.1	1.8	do	302
303	Cut when nearly ripe *h* †	55.29	1.63	3.04	15.84	23.32	0.88	3.7	6.8	35.4	52.1	2.0	do	303
304	Cut June 23, nearly headed out *h* ‡	78.70	1.60	2.34	6.11	10.45	0.80	7.5	11.0	28.7	49.0	3.8	Me. State Col. Rep., 1879, p. 42	304
305	Cut July 3, in full bloom *h* ‡	71.92	1.70	2.32	9.35	13.87	0.84	6.1	8.3	33.3	49.3	3.0	do	305
306	Cut July 14, out of bloom *h* ‡	65.20	1.80	2.00	12.09	17.97	0.94	5.2	5.7	34.7	51.7	2.7	do	306
307	Cut July 30, nearly ripe *h* ‡	63.27	1.83	2.02	13.62	18.45	0.81	5.0	5.5	37.1	50.2	2.2	do	307
308	Cut June 1, spike invisible *a* §	70.70	2.54	3.67	5.83	15.92	1.34	8.7	12.5	19.9	54.3	4.6	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 133.	308
309	Cut June 1, spike visible *a* §	71.90	1.80	3.34	5.91	16.09	0.96	6.4	11.9	21.0	57.3	3.4	do	309
310	Cut June 23, before bloom *a* §	67.50	3.19	3.36	7.16	17.61	1.18	9.8	10.3	22.0	54.3	3.6	do	310
311	Cut June 23, in early bloom *a* §	64.90	2.12	3.58	7.97	20.08	1.35	6.0	10.2	22.7	57.3	3.8	do	311
312	Cut June 18, in full bloom *a* §	67.20	1.86	3.25	7.19	19.33	1.17	5.6	9.9	21.9	59.0	3.6	do	312
313	Cut June 18, in early seed *a* §	77.80	2.34	2.68	5.08	11.34	0.76	10.5	12.1	22.9	51.1	3.4	do	313
314	Cut June 4, in bloom *a* ‖	63.40	2.40	3.10	8.61	21.04	1.45	6.6	8.5	23.5	57.4	4.0	do	314
315	Cut July 1, in full bloom *a* ‖	71.90	1.58	2.10	6.42	17.16	0.84	5.6	7.5	22.8	61.1	3.0	do	315
316	Cut July 19, head out *a* *	78.56	1.84	3.03	5.14	10.12	1.31	8.6	14.1	24.0	47.2	6.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 133.	316
317	Cut July 26, in bloom *a* *	66.75	2.38	3.65	9.09	16.64	1.49	7.2	11.0	27.4	49.9	4.5	do	317
318	Cut July 3, after bloom *a* *	55.63	2.83	3.79	12.26	22.46	2.03	6.5	8.7	28.3	51.8	4.7	do	318
319	Cut July 10, after bloom *a* *	58.86	2.31	3.37	11.14	22.79	1.53	5.6	8.2	27.1	55.4	3.7	do	319
320	Cut June 8, head not out *a*	70.00	2.38	3.29	8.76	14.98	0.59	7.9	11.0	29.2	49.9	2.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 134.	320
321	Cut June 15, before bloom *a*	67.50	2.48	2.53	9.64	17.11	0.74	7.6	7.8	29.6	52.7	2.3	do	321
322	Cut June 26, in bloom *a*	64.50	2.50	1.96	11.45	18.81	0.78	7.0	5.5	32.3	53.0	2.2	do	322
323	Cut July 6, after bloom *a*	56.30	2.90	2.43	13.69	23.57	1.11	6.6	5.6	31.3	54.0	2.5	do	323
324	Cut July 16, in early seed *a*	53.00	2.80	2.27	11.61	28.56	1.76	5.9	4.8	24.7	60.9	3.7	do	324

* First year's growth. † Heavy, wet (underdrained) clayey loam; in grass since 1872. ‡ Land in grass since 1885. § Good soil. ‖ Poor soil.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	GRASSES—continued.													
	Timothy, herd's grass (of New England and New York) (*Phleum pratense*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
325	Full bloom	57.32	1.85	3.41	13.92	22.39	1.11	4.3	8.0	32.6	52.5	2.6	N. Y. State Ex. Sta. Rep., 1887, p. 413	325
326	Late cut	46.98	1.91	3.38	18.56	27.74	1.43	3.6	6.4	35.0	52.3	2.7	do	326
327	Full bloom	59.85	2.22	3.26	12.30	21.14	1.23	5.5	8.1	30.6	52.7	3.1	do	327
328	Late cut	48.68	2.31	3.31	19.35	25.03	1.32	4.5	6.4	37.7	48.8	2.6	do	328
329	Full bloom	59.77	2.23	3.14	12.94	20.84	1.28	5.5	7.8	31.7	51.8	3.2	do	329
330	Late cut	48.78	2.48	3.14	16.57	27.43	1.60	4.8	6.1	32.4	53.6	3.1	do	330
331	Full bloom, 1886*	71.36	1.36	1.34	8.56	16.54	0.84	4.8	4.7	29.9	57.7	2.9	N. Y. State Ex. Sta. Rep., 1887, p. 407	331
332	Full bloom 1887*	59.85	2.22	3.26	12.30	21.14	1.23	5.5	8.1	30.7	52.6	3.1	do	332
333	Fertilized, cut in bloom *c*	65.74	1.81	2.81	11.38	17.59	0.67	5.3	8.2	33.2	51.4	1.9	Mass. State Ex. Sta. Bul. 24, 1887, p. 10	333
334	Unfertilized, cut in bloom	65.00	1.88	3.09	11.38	17.93	0.72	5.3	8.8	32.5	51.3	2.1	Mass. State Ex. Sta. Bul. 26, 1887, p. 8	334
	In full bloom (fertilizer, pounds per acre)—													
335	300 sulphate of potash *a c d e*	60.86	1.69	2.72	12.18	21.37	1.18	4.3	6.9	31.1	54.6	3.0	N. Y. State Ex. Sta. Rep., 1887, p. 449	335
336	150 sulphate of ammonia *a c d e*	55.32	1.83	3.35	14.49	23.79	1.22	4.1	7.5	32.4	53.3	2.7	do	336
337	350 acid phosphate *a c d e*	58.12	2.14	3.14	13.69	21.38	1.53	5.1	7.5	32.7	51.1	3.6	do	337
338	300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate. *a c d e*	58.60	1.97	3.49	14.08	20.48	1.38	4.8	8.4	34.0	49.5	3.3	do	338
339	300 sulpbate of potasb, 350 acid phosphate. *a c d e*	59.13	2.14	3.58	13.95	19.71	1.49	5.2	8.8	34.1	48.3	3.6	do	339
340	150 sulphate of ammonia *a c d e*	57.32	1.85	3.41	13.92	22.39	1.11	4.3	8.0	32.6	52.5	2.6	do	340
341	150 sulphate of ammonia, 350 acid phosphate. *a c d e*	56.27	2.12	3.36	13.52	23.40	1.33	4.8	7.7	30.9	53.5	3.1	do	341
342	150 sulphate of ammonia, 350 acid phosphate, 350 lime. *a c d e*	54.98	1.93	3.52	14.12	24.08	1.37	4.3	7.8	31.4	53.4	3.1	do	342
343	300 sulphate of potasb, 150 sulphate of ammonia, 350 lime. *a c d e*	57.19	2.06	3.17	12.99	23.38	1.21	4.8	7.4	30.3	54.7	2.8	do	343
344	300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate, 350 lime. *a c d e*	55.91	2.28	3.64	13.49	23.26	1.42	5.2	8.3	30.6	52.7	3.2	do	344
345	150 sulphate of ammonia, 350 lime, 550 gypsum. *a c d e*	56.14	2.23	3.37	14.15	22.55	1.56	5.1	7.7	32.3	51.3	3.6	do	345
346	300 sulphate of potash, 150 sulphate of ammonia. 350 acid phosphate, 550 gypsum. *a c d e*	55.79	2.28	3.73	14.11	22.60	1.49	5.2	8.4	31.9	51.2	3.3	do	346
347	350 lime *a c d e*	60.18	2.09	3.06	12.83	20.56	1.28	5.3	7.7	32.2	51.6	3.2	do	347
348	550 gypsum *a c d e*	58.38	2.06	2.91	13.20	22.29	1.16	5.0	7.0	31.7	53.5	2.8	do	348

349	Nothing *a c d e*	59.85	2.22	3.26	12.30	21.14	1.23	5.5	8.1	30.7	52.6	3.1	do	349
350	100 salt *a c d e*	59.36	2.24	3.68	12.65	20.59	1.49	5.5	9.1	31.1	50.6	3.7	do	350
351	180 nitrate of soda *a c d e*	57.14	2.12	3.40	13.58	22.39	1.37	5.0	7.9	31.7	52.2	3.2	do	351
352	150 sulphate of ammonia *a c d e*	59.91	2.07	2.78	12.50	21.33	1.41	5.1	6.9	31.2	53.3	3.5	do	352
353	150 muriate of potash *a c d e*	59.77	2.23	3.14	12.74	20.84	1.28	5.5	7.8	31.7	51.9	3.1	do	353
354	300 sulpbate of potash *a c d e*	58.59	2.00	2.95	12.54	22.50	1.42	4.8	7.1	30.3	54.4	3.4	do	354
355	50 ferrous sulphate *a c d e*	56.03	1.99	3.27	14.05	23.03	1.63	4.5	7.4	32.0	52.4	3.7	Mass. State Sta. Rep., 1885, p. 55	355
	All analyses — Maximum	78.70	3.19	3.79	19.35	28.56	2.03	10.5	14.1	37.7	61.1	6.1		
	All analyses — Minimum	46.98	1.36	1.34	5.08	10.12	0.59	3.6	4.7	19.9	47.2	1.8		
	All analyses — Average	**61.58**	**2.10**	**3.06**	**11.77**	**20.30**	**1.19**	**5.4**	**8.0**	**30.7**	**52.8**	**3.1**		
	Average composition, before bloom, headed, 3 analyses.†	**69.26**	**2.27**	**3.35**	**8.32**	**15.79**	**1.01**	**7.7**	**11.3**	**26.3**	**50.9**	**3.8**		
	Average composition, in full bloom, 14 analyses.‡	**65.09**	**1.98**	**2.79**	**10.42**	**18.70**	**1.02**	**5.7**	**7.9**	**29.9**	**53.6**	**2.9**		
	Average composition, soon after bloom, 5 analyses.§	**59.38**	**2.30**	**2.88**	**12.55**	**21.63**	**1.26**	**5.7**	**7.1**	**30.9**	**53.2**	**3.1**		
	Average composition, in seed, nearly ripe, 4 analyses.‖	**62.34**	**2.15**	**2.50**	**11.54**	**20.42**	**1.05**	**5.7**	**6.9**	**30.7**	**54.2**	**2.8**		
	Pearl millet (*Penicillaria spicata*):													
356	Seeded May 16, in drills 3¼ feet apart; cut Sept. 10; unfertilized. *h*	77.21	1.61	1.86	7.81	11.30	0.21	7.1	8.1	34.3	49.6	0.9	do	356
357	Seeded May 16, in drills 3¼ feet apart; cut Sept. 10; fertilized. *h*	76.37	1.58	1.86	8.11	11.73	0.35	6.7	7.9	34.3	49.6	1.5	do	357
	Average	**76.79**	**1.59**	**1.86**	**7.96**	**11.52**	**0.28**	**6.9**	**8.0**	**34.3**	**49.6**	**1.2**		
	English blue grass, wire grass (*Poa compressa*):													
358	Cut June 1, panicle not out; poor soil *a*	67.90	2.49	3.43	5.84	18.64	1.70	7.8	10.7	18.2	58.0	5.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135.	358
359	Cut June 1, panicle well out; poor soil *a*	68.70	2.13	3.85	6.67	17.27	1.38	6.8	12.3	21.3	55.2	4.4	do	359
360	Cut June 17, in bloom; poor soil *a*	70.70	1.78	3.72	5.43	17.05	1.32	6.1	12.7	18.5	58.2	4.5	do	360
361	Cut June 23, after bloom; poor soil *a*	51.80	2.47	4.33	8.75	30.79	1.86	5.1	9.0	18.2	63.8	3.9	do	361
362	Cut before heading	69.73	3.43	10.09	5.49	9.32	1.94	11.4	30.3	18.1	30.8	6.4	Ky. State Col. Bul. 5, 1885, p. 24	362
	Wood meadow grass (*Poa nemoralis*):													
363	Cut June 16, 1888, in full bloom *a b* ¶	64.33	1.91	3.66	12.04	16.98	1.08	5.4	10.3	33.8	47.5	3.0	Conn. State Sta. Rep., 1888, p. 101	363
364	Cut 1889, in full bloom *a b* ¶	66.57	1.67	2.32	11.62	17.03	0.79	5.0	6.9	34.8	51.0	2.3	Conn. State Sta. Rep., 1889, p. 248	364
	Average	**65.45**	**1.79**	**2.99**	**11.83**	**17.01**	**0.93**	**5.2**	**8.7**	**34.3**	**49.1**	**2.7**		
	Kentucky blue grass, June grass (*Poa pratensis*):													
365	Cut Apr. 23, panicle just visible *a* **	76.70	1.88	4.64	4.30	11.34	1.14	8.1	19.9	18.4	48.7	4.9	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135.	365
366	Cut May 1, panicle spreading *a* **	70.80	1.61	4.74	6.67	14.99	1.19	5.5	16.2	22.8	51.4	4.1	do	366
367	Cut May 21, in full bloom *a* **	71.90	2.33	3.54	6.68	14.45	1.10	8.3	12.6	23.8	51.4	3.9	do	367

* From same plat.
† Nos. 300. 310, 316.
‖ Nos. 303, 307, 313, 324.
‡ Nos. 301, 305, 314, 315, 317, 322, 325, 327, 329, 331, 332, 333, 334.
§ Nos. 302, 306, 318. 319, 323.
¶ Grown on same soil.
** Grown on good soil.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	GRASSES—continued.													
	Kentucky blue grass, June grass (*Poa pratensis*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
368	Cut June 5, in seed *a* *	55.90	2.81	5.51	10.74	23.17	1.87	6.4	12.5	24.3	52.5	4.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 135.	368
369	Cut May 8, in full bloom *a* †	69.00	2.18	2.42	7.90	17.62	0.88	7.0	7.8	25.5	56.8	2.9	do	369
370	Cut June 1, after bloom; brown *a* ‡	55.40	3.22	3.96	10.64	25.03	1.75	7.2	8.9	23.9	56.1	3.9	do	370
371	Cut May 19, in full bloom *a* †	66.20	2.62	3.53	7.81	18.69	1.15	7.7	10.4	23.1	55.4	3.4	do	371
372	Cut June 8, in seed; brown *a* ‡	54.60	2.81	3.34	11.05	26.61	1.59	6.2	7.4	24.3	58.6	3.5	do	372
373	Not headed, 5 inches high	82.53	1.59	4.59	3.78	6.50	1.01	9.1	26.3	21.6	37.2	5.8	Ky. State Col. Bul. 5, 1885, p. 23	373
374	Well headed, before blossom	59.85	3.66	7.18	12.80	14.90	1.61	9.1	17.9	31.9	37.1	4.0	Ky. State Col. Bul. 5, 1885, p. 24	374
375	Cut June 11, in full bloom *a b*	75.70	1.57	2.75	8.05	11.18	0.75	6.5	11.3	33.1	46.0	3.1	Conn. State Ex. Sta. Rep., 1888, p. 101	375
376	Time of cutting unknown	58.76	2.03	3.18	13.29	21.27	1.47	4.9	7.7	32.2	51.6	3.6	N. Y. State Ex. Sta. Rep., 1888, p. 237	376
377	Cut Apr. 28; 5 to 6 inches high; old sod *a*	68.05	3.67	5.76	7.09	13.66	1.77	11.5	18.0	22.2	42.7	5.6	Iowa Ex. Sta. Bul. 10, 1890	377
378	Cut May 8; 8 inches high; old sod *a*	66.71	3.55	4.52	7.57	16.27	1.38	10.7	13.5	22.7	48.9	4.2	do	378
379	Cut May 18; panicle spreading; old sod *a*	63.30	3.21	4.08	8.94	19.04	1.43	8.7	11.1	24.4	51.9	3.9	do	379
380	Cut May 28; early bloom; old sod *a*	62.91	3.14	3.59	10.80	18.72	0.84	8.5	9.7	29.1	50.5	2.2	do	380
381	Cut June 7; after bloom; old sod *a*	61.24	3.36	3.06	11.60	19.70	1.06	8.7	7.9	29.9	51.8	2.7	do	381
382	Cut July 5; in seed; brown *a*	51.67	4.82	3.81	14.77	23.46	1.47	10.0	7.9	30.5	48.5	3.1	do	382
	All analyses: Maximum	82.53	4.82	7.18	14.77	26.61	1.87	11.5	26.3	32.2	58.6	5.8		
	All analyses: Minimum	51.67	1.57	2.42	3.78	6.50	0.75	4.9	7.4	18.4	37.1	2.2		
	All analyses: Average	**65.07**	**2.78**	**4.12**	**9.14**	**17.59**	**1.30**	**8.0**	**11.8**	**26.2**	**50.3**	**2.7**		
	Average, headed, not in bloom, 3 analyses.§	**64.65**	**2.83**	**5.33**	**9.47**	**16.31**	**1.41**	**8.0**	**15.1**	**26.8**	**46.1**	**4.0**		
	Average, in bloom, 5 analyses.‖	**69.14**	**2.37**	**3.17**	**8.25**	**16.13**	**0.94**	**7.7**	**10.3**	**26.7**	**52.3**	**3.0**		
	Average, after bloom, in seed, 4 analyses.¶	**54.39**	**3.42**	**4.15**	**11.80**	**24.57**	**1.67**	**7.5**	**9.1**	**25.8**	**53.9**	**3.7**		
	Pigeon grass, foxtail (*Setaria glauca*):													
383	Cut July 1, very young *a*	74.20	2.80	4.39	5.59	12.42	0.60	10.8	17.0	21.7	48.1	2.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 136.	383
384	Cut July 24, early bloom *a*	68.40	2.29	2.86	8.14	17.47	0.84	7.3	9.0	25.8	55.3	2.7	do	384
	Hungarian grass, German millet, (*Setaria italica*):													
385	Cut July 17; heads partly filled *h*	78.26	1.87	2.79	7.55	9.08	0.45	8.6	12.8	34.7	41.9	2.0	Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 34.	385

386	Cut Aug. 3; heads well filled; seed soft *h*	71.74	1.45	2.72	9.34	14.23	0.52	5.1	9.6	33.1	50.4	1.8	do	386
387	Cut Aug. 18; heads ripe; seed hard *h*	70.15	1.89	2.05	10.37	15.03	0.51	6.3	6.9	34.7	50.4	1.7	do	387
888	Cut July 24, in bloom *a h*	62.70	2.16	3.22	10.78	20.08	1.06	5.8	8.6	28.9	53.9	2.8	Pa. Ex. Sta. Rep., 1887, p. 133	388
389	Cut Sept 7	72.43	1.19	4.73	8.18	12.33	1.14	4.3	17.1	29.6	44.9	4.1	Vt. Ex. Sta. Rep., 1888, p. 74	389
390	Golden millet, Mean's grass, cut July 24, before bloom *a h*.	72.05	2.56	3.75	6.63	14.23	0.78	9.2	13.4	23.7	50.9	2.8	Pa. Ex. Sta. Rep., 1887, p. 133	390
	Johnson grass (*Sorghum halepense*):													
391	Cut Sept. 5; seeds formed but not ripe	68.62	1.74	2.89	9.37	16.44	0.94	5.5	9.2	29.9	52.4	3.0	Conn. State Ex. Sta. Rep., 1887 p. 103	391
392	Time of cutting unknown; 6 to 7 feet high *a*	62.00	1.58	1.82	14.25	19.42	0.93	4.2	4.8	37.5	51.1	2.4	Md. Ex. Sta. Rep., 1888, p. 68	392
393	Cut June 2; in full bloom *a h i j*	80.15	1.26	2.44	4.45	11.11	0.59	6.4	12.3	22.4	55.9	3.0	S. C. Ex. Sta. Rep., 1888, p. 132	393
394	Broom grass (*Andropogon dissitiflorus*), cut Sept. 9; grown on poor soil. *a b c*	64.50	1.24	2.20	13.03	18.30	0.73	3.5	6.2	36.6	51.6	2.1	Conn. State Ex. Sta. Rep., 1887, p. 103	394
395	Blue stem, finger-spiked broom grass (*Andropogon provincialis*), cut Sept. 9; rowen; headed but not in bloom. *a b c*	73.09	1.58	2.15	8.51	14.05	0.62	5.9	8.2	31.5	52.1	2.3	do	395
396	Broom grass (*Andropogon scoparius*), cut Sept. 9; grown on poor soil. *a b c*	57.08	1.72	1.74	16.21	22.64	0.61	4.0	4.1	37.8	52.7	1.4	do	396
397	Chess, cheat (*Bromus secalinus*)	60.35	1.85	3.17	13.05	20.46	1.12	4.7	8.0	32.9	51.6	2.8	N. Y. State Ex. Sta. Rep., 1886, p. 365	397
398	Indian grass, wild oats (*Chrysopogon nutans*), cut Sept. 9; rowen; headed but not in bloom. *a b c*	67.01	2.86	2.42	9.96	17.00	0.75	8.7	7.3	30.4	51.3	2.3	Conn. State Ex. Sta. Rep., 1887, p. 103	398
399	Bermuda grass (*Cynodon dactylon*), cut June 16; in bloom. *a*	71.70	2.00	2.15	5.89	17.31	0.95	7.1	7.6	20.8	61.1	3.4	S. C. Ex. Sta. Rep., 1888, p. 124	399
400	Nerved meadow grass (*Glyceria nervata*), cut in bloom. *a b*	74.88	1.83	2.64	8.41	11.75	0.49	7.3	10.4	33.5	46.8	2.0	Conn. State Ex. Sta. Rep., 1887, p. 103	400
401	Redtop panic (*Panicum agrostoides*), cut Sept. 9. *a b*	65.01	3.55	2.42	10.44	17.93	0.65	10.1	6.9	29.8	51.4	1.8	do	401
402	Barnyard grass (*Panicum crus-galli*, var. *hispidum*), cut Sept. 5; seed formed but not ripe. *a b c*	80.52	1.43	1.42	6.75	9.54	0.34	7.3	7.3	34.7	48.9	1.8	do	402
403	Tall panic (*Panicum virgatum*), cut Sept. 9; rowen; headed but not in bloom. *a b c*	65.16	1.94	3.67	10.40	17.99	0.84	5.6	10.5	29.8	51.7	2.4	do	403
404	Reed canary grass (*Phalaris arundinacea*)	65.23	2.47	3.65	10.33	16.98	1.34	7.1	10.5	29.7	48.9	3.8	N. Y. State Ex. Sta. Rep., 1886, p. 365	404
405	Rough-stalked meadow grass (*Poa trivialis*), cut June 11; in full bloom.	72.79	1.73	2.67	8.24	13.74	0.83	6.3	9.8	30.3	50.6	3.0	Conn. State Ex. Sta. Rep., 1888, p. 101	405
406	Teosinte (*Euchlæna luxurians*)	66.77	3.97	2.54	12.33	13.60	0.79	12.0	7.7	37.1	40.8	2.4	Miss. Ex. Sta. Bul. 8, 1889	406
407	Smut grass (*Sporobolus indicus*), cut June 4; in full bloom. *a h i j*	74.02	2.01	3.14	5.20	14.30	1.24	7.8	12.1	20.0	55.3	4.8	S. C. Ex. Sta. Rep., 1888, p. 132	407
408	Porcupine grass, arrow grass (*Stipa spartea*)	59.04	2.30	3.97	13.74	19.61	1.34	5.6	9.7	33.5	47.9	3.3	N. Y. State Ex. Sta. Rep., 1886, p. 365	408
	Pasture grass:													
409	Blue grass with considerable white clover. *a h i j*	73.37	2.48	5.82	4.85	11.81	1.69	9.2	20.9	18.3	44.4	6.2	Pa. Ex. Sta. Rep., 1886, p. 56	409
410	Species unknown	73.21	2.76	5.29	6.52	11.02	1.20	10.3	19.7	24.3	41.2	4.5	Pa. Ex. Sta. Rep., 1886, p. 63	410
411	Do	75.77	2.65	3.68	6.76	10.11	1.03	10.9	15.2	27.9	41.7	4.3	do	411
412	Rowen of mixed grasses	73.48	2.00	3.51	10.45	9.58	0.98	7.5	13.3	39.4	36.1	3.7	N. Y. State Ex. Sta. Rep., 1885, p. 302	412
	LEGUMES.													
	Red clover (*Trifolium pratense*):													
413	Cut just before bloom *h*	61.21	3.24	5.54	10.76	18.59	0.66	8.3	14.3	27.8	47.9	1.7	Conn. State (Middletown) Sta. Rep., 1877–'78, p. 32.	413
414	Cut in full bloom *h*	47.13	4.04	7.13	14.69	25.75	1.26	7.7	13.5	27.8	48.6	2.4	do	414
415	Cut when nearly out of bloom *h*	64.72	2.60	4.63	10.54	16.88	0.63	7.3	13.1	29.9	47.9	1.8	do	415
416	Cut when nearly ripe *h*	61.05	2.54	4.03	12.36	19.08	0.94	6.5	10.4	31.8	48.9	2.4	do	416

* Grown on good soil. † Grown on poor soil. ‡ Grown on poor soil; wayside. § Nos. 366, 374, 379. ‖ Nos, 367, 369, 371, 375, 380. ¶ Nos. 368, 370, 372, 382.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	LEGUMES—continued.													
	Red clover (*Trifolium pratense*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
417	Cut Apr. 19; flower head invisible *a**	82.80	1.60	4.56	1.89	7.84	1.31	9.3	26.5	11.0	45.6	7.6	U. S. Dept. Agr. Rep., 1880, p. 151	417
418	Cut May 4; flower head well formed *a**	82.70	1.54	4.38	2.25	8.13	1.00	8.9	25.5	13.1	46.7	5.8	do	418
419	Cut May 10; in full bloom *a**	79.90	1.67	3.85	3.20	10.42	0.96	8.3	19.1	15.9	51.9	4.8	do	419
420	Cut June 1; after bloom *a**	74.20	1.87	4.67	5.14	12.93	1.19	7.3	18.1	19.9	50.1	4.6	do	420
421	Cut June 8; in seed *a**	73.90	1.92	3.98	4.98	14.18	1.04	7.4	15.2	19.1	54.3	4.0	do	421
422	Cut June 23; flower head invisible *a*†	82.30	1.97	4.68	2.47	7.88	0.70	11.2	26.4	13.9	44.5	4.0	do	422
423	Cut July 1; in full bloom *a*†	73.40	2.37	5.53	4.21	13.46	1.03	8.9	20.8	15.8	50.6	3.9	do	423
424	Cut July 15; in seed *a*†	63.70	2.44	5.48	6.48	20.19	1.71	6.7	15.1	17.9	55.6	4.7	do	424
425	Time of cutting unknown *b*	73.33	2.16	4.09	8.12	11.61	0.69	8.1	15.3	30.4	43.6	2.6	N. J. Ex. Sta. Rep., 1884, p. 106	425
426	Cut July 30; first cutting *b h* ‡§	73.48	2.08	3.66	8.38	11.73	0.67	7.9	13.8	31.6	44.2	2.5	N. J. Ex. Sta. Rep., 1886, p. 171	426
427	Cut Aug. 26; second cutting *b h* ‡§	68.89	2.79	4.63	8.66	14.07	0.96	9.0	14.9	27.9	45.1	3.1	do	427
428	Time of cutting unknown	75.63	1.55	3.66	6.86	11.08	1.22	6.4	15.0	28.2	45.4	5.0	N. Y. State Ex. Sta. Rep., 1886, p. 365	428
429	Do	72.92	1.74	3.94	7.86	12.15	1.32	6.5	14.5	29.2	44.9	4.9	N. Y. State Ex. Sta. Rep., 1887, p. 425	429
	Cut June 23, 1886 (fertilizers, pounds per acre)—													
430	300 sulphate of potash *a c d e*	67.45	1.98	4.54	9.19	15.50	1.34	6.1	13.9	28.2	47.7	4.1	N. Y. State Ex. Sta. Rep., 1887, p. 444	430
431	150 sulphate of ammonia *a c d e*	65.97	2.15	4.44	10.35	15.80	1.29	6.3	13.1	30.4	46.4	3.8	do	431
432	350 acid phosphate *a c d e*	67.20	2.20	4.76	10.13	14.41	1.30	6.7	14.5	30.9	43.9	4.0	do	432
433	300 sulphate of potash, 150 sulphate of ammonia, 350 acid phosphate. *a c d e*	69.91	2.02	4.55	9.64	12.64	1.24	6.7	15.1	32.0	42.1	4.1	do	433
434	300 sulphate of potash, 350 acid phosphate. *a c d e*	69.77	2.05	4.38	9.04	13.50	1.26	6.8	14.5	29.9	44.6	4.2	do	434
435	150 sulphate of ammonia *a d e*	68.10	2.06	4.53	10.70	13.34	1.27	6.5	14.2	33.6	41.7	4.0	do	435
436	150 sulphate of ammonia 350 acid phosphate. *a d e*	65.83	2.15	5.06	11.31	15.26	1.39	6.3	14.8	30.2	44.6	4.1	do	436
437	150 sulphate of ammonia, 350 acid phosphate, 350 lime. *a d e*	67.43	2.06	4.82	9.78	14.44	1.27	6.3	14.8	30.0	45.0	3.9	do	437
438	300 sulphate of potash, 150 sulphate of ammonia, 350 lime. *a d c*	68.42	2.07	4.34	9.51	14.30	1.36	6.6	13.8	30.1	45.2	4.3	do	438
439	300 sulphate of potash, 150 sulphate of ammonia, 350 lime, 350 acid phosphate. *a d e*	71.15	1.89	4.34	8.46	13.01	1.15	6.6	15.1	29.3	45.0	4.0	do	439
440	150 sulphate of ammonia, 350 lime, 550 gypsum. *a d e*	70.10	1.99	4.30	8.68	13.98	0.97	6.7	14.4	29.0	46.7	3.2	do	440
441	300 sulphate of potash, 150 sulphate of ammonia, 550 gypsum, 350 acid phosphate. *a d e*	68.37	2.10	4.21	9.05	15.12	1.15	6.6	13.3	28.6	47.8	3.7	do	441

442	350 lime *a d e*	66.54	2.15	4.27	10.57	14.93	1.34	8.4	12.8	31.6	44.6	4.6	do	442
443	550 gypsum *a d e*	68.64	2.03	4.00	9.83	14.24	1.24	6.	12.8	31.4	45.4	3.9	do	443
444	Nothing *a d c*	71.02	1.80	3.80	8.83	13.38	1.17	6.2	13.1	30.5	46.2	4.0	do	444
445	100 salt *a d e*	68.10	2.15	4.76	10.04	13.82	1.13	6.7	14.9	31.5	43.4	3.5	do	445
446	180 nitrate of soda *a d e*	69.80	1.91	4.21	9.16	13.62	1.30	6.3	13.9	30.4	45.1	4.3	do	446
447	150 sulphate of ammonia *a d e*	69.66	2.05	4.44	8.95	13.59	1.31	6.8	14.6	29.5	44.8	4.3	do	447
448	150 muriate of potash *a d e*	66.37	2.26	5.63	10.84	13.45	1.45	6.7	16.8	32.3	39.9	4.3	do	448
449	300 sulphate of potash *a d e*	66.80	2.12	4.67	10.94	13.71	1.76	6.4	14.1	33.0	41.2	5.3	do	449
450	50 ferrous sulphate *a d e*	68.67	1.97	4.58	10.15	13.19	1.44	6.3	14.6	32.4	42.1	4.6	do	450
451	Cut June 18; full bloom *a h i j*	71.27	2.09	3.47	8.36	13.74	1.07	7.2	12.1	20.1	47.9	3.7	Pa. Ex. Sta. Bul. 1, 1887	451
452	Time of cutting unknown	84.64	2.33	3.43	3.06	5.73	0.81	15.2	22.3	19.9	37.3	5.3	Pa. Ex. Sta. Rep., 1888, p. 86	452
453	First crop, cut in bloom *a h i j*	91.78	0.86	1.71	1.82	3.49	0.34	10.4	20.8	22.2	42.5	4.1	Wis. Ex. Sta. Rep., 1889, p. 210	453
454	Second crop, cut when flower heads appeared. *a h i j*	77.52	1.74	3.33	5.58	11.16	0.67	7.8	14.8	24.8	49.6	3.0	do	454
455	Third crop, cut when flower heads appeared. *a h i j*	72.51	1.98	4.37	6.57	13.52	1.05	7.2	15.9	23.9	49.2	3.8	do	455
	All analyses: Maximum	91.78	4.04	7.13	14.69	25.75	1.76	15.2	26.5	33.6	55.6	7.6		
	All analyses: Minimum	47.13	0.86	1.71	1.82	3.49	0.34	6.1	10.4	11.0	37.4	1.7		
	All analyses: Average	**70.79**	**2.10**	**4.41**	**8.12**	**13.45**	**1.13**	**7.2**	**15.3**	**27.8**	**45.8**	**3.9**		
	Average, before bloom, 2 analyses	**72.00**	**2.40**	**5.00**	**6.50**	**13.30**	**0.80**	**8.6**	**17.8**	**23.2**	**47.5**	**2.9**		
	Average, in full bloom, 5 analyses.‖	**72.70**	**2.20**	**4.30**	**6.50**	**13.40**	**0.90**	**8.1**	**15.7**	**23.8**	**49.2**	**3.2**		
	Average, after bloom and in seed, 4 analyses.¶	**68.20**	**2.20**	**4.50**	**7.20**	**16.70**	**1.20**	**6.9**	**14.2**	**22.6**	**52.5**	**3.8**		
456	White clover (*Trifolium repens*)	78.23	1.79	4.42	4.70	9.44	1.42	8.2	20.3	21.6	43.4	6.5	N. Y. State Ex. Sta. Rep., 1886, p. 365	456
457	Alsike clover (*Trifolium hybridum*)	77.29	1.95	3.66	5.32	10.76	1.02	8.6	16.1	23.5	47.3	4.5	do	457
458	In bloom; cut Aug. 2; sown preceding year, in drills 10 to 12 inches apart. *a*	75.00	1.93	3.63	7.26	10.98	1.20	6.8	14.5	29.0	44.9	4.8	Pa. Ex. Sta. Rep., 1887, p. 136	458
459	In bloom	72.26	2.09	4.23	9.35	11.22	0.85	7.5	15.3	33.7	40.4	3.1	N. Y. State Ex. Sta. Rep., 1888, p. 237	459
460	Do	74.53	1.88	3.93	7.99	11.53	0.64	7.4	15.4	29.4	45.3	2.5	do	460
	All analyses, excluding 456: Maximum	77.29	2.09	4.23	9.35	11.53	1.20	8.6	16.1	33.7	47.3	4.8		
	All analyses, excluding 456: Minimum	72.26	1.88	3.63	5.32	10.76	0.64	6.8	14.5	23.5	40.4	2.5		
	All analyses, excluding 456: Average	**74.77**	**1.96**	**3.86**	**7.36**	**11.12**	**0.93**	**7.8**	**15.3**	**29.2**	**44.0**	**3.7**		
	Alfalfa, lucern (*Medicago sativa*):													
461	Cut when young; no buds *a*	80.40	2.27	5.77	2.54	8.20	0.82	11.6	29.5	12.9	41.8	4.2	U. S. Dept. Agr. Rep., 1880, p. 152	461
462	Cut before bloom *a*	79.30	2.01	4.43	4.03	9.34	0.89	9.7	21.4	19.5	45.1	4.3	do	462
463	Cut June 1; in bloom; aftermath	70.10	2.00	5.03	6.66	15.36	0.85	6.7	16.9	22.3	51.3	2.8	do	463
464	Time of cutting unknown	75.01	2.15	4.07	8.68	9.45	0.64	8.6	16.3	34.7	37.8	2.6	N. Y. State Ex. Sta. Rep., 1883, p. 150	464
465	Do	56.73	3.77	7.01	14.81	16.25	1.73	8.7	15.5	34.2	27.6	4.0	N. Y. State Ex. Sta. Rep., 1886, p. 365	465
466	Fourth cutting	67.20	3.25	7.69	8.67	11.85	1.34	9.9	23.4	26.4	36.2	4.1	do	466
467	First cutting, June 4 *b h* **	79.43	1.92	4.13	5.84	8.14	0.54	9.3	20.0	28.4	39.7	2.6	N. J. Ex. Sta. Rep., 1886, p. 171	467
468	Second cutting, July 19 *b h* **	73.80	1.78	4.82	9.08	10.03	0.49	6.8	18.4	34.6	38.3	1.9	do	468

* First growth. † Aftermath. ‡ From same field. § In *loc. cit.*, analyses and tonnage per acre compared with that of lucern.
‖ Nos. 414, 419, 420, 451, 453. ¶ Nos. 416, 420, 421, 424. ** In *loc. cit.*, analysis and yield compared with that of clover.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	LEGUMES—continued.													
	Alfalfa, lucern (*Medicago sativa*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
469	Third cutting, Sept. 11 *b h* *	70.00	1.98	4.79	10.02	12.58	0.63	6.6	16.0	33.4	41.9	2.1	N. J. Ex. Sta. Rep., 1886, p. 171	469
470	First cutting, July 7 *b h* ‡	79.60	2.04	3.59	5.61	8.38	0.77	10.0	17.6	27.5	41.1	3.8	N. J. Ex. Sta. Rep., 1887, p. 164	470
471	Second cutting, Aug. 18 *b k* ‡	79.39	2.00	3.79	4.89	9.07	0.86	9.7	18.4	23.7	44.0	4.2	do	471
472	Third cutting, Sept. 27 *b h* ‡	82.03	2.16	4.07	3.03	7.87	0.84	12.0	22.6	16.8	43.9	4.7	do	472
473	Cut June 11 *b h* ‡	76.39	2.10	4.00	7.10	9.68	0.73	8.9	17.0	30.1	40.9	3.1	N. J. Ex. Sta. Rep., 1887, p. 168	473
474	Cut July 28 *b h* ‡	71.56	2.00	4.90	8.69	11.83	1.02	7.0	17.1	30.6	41.7	3.6	do	474
475	Cut Sept. 19 *b h* ‡	74.21	2.03	4.21	8.20	10.61	0.74	7.9	16.3	31.8	41.1	2.9	do	475
476	Time of cutting unknown	70.91	2.64	5.39	9.91	10.23	0.92	9.1	15.5	34.1	38.1	3.2	N. Y. State Ex. Sta. Rep., 1887, p. 425	476
477	Cut July 24; before bloom *a h i j* §	73.34	2.70	5.12	7.98	10.15	0.71	10.1	19.2	29.9	38.1	2.7	Pa. Ex. Sta. Rep., 1887, p. 135	477
478	Cut Aug. 2; in bloom *a h i j* §	70.83	2.48	3.50	7.66	14.88	0.65	8.5	12.0	26.3	51.0	2.2	do	478
479	Cut Oct. 4; seed ripe *a h i j* §	62.57	3.41	3.86	9.60	19.16	1.40	9.1	10.3	25.7	51.2	3.7	do	479
480	Cut June 4; beginning to bud	77.65	2.82	4.42	3.13	11.10	0.88	12.6	19.8	13.9	49.7	4.0	Colo. Ex. Sta. Bul. 8, 1889	480
481	Cut June 20; full bloom	69.71	3.90	5.08	4.89	15.30	1.12	12.9	16.8	16.1	50.5	3.7	do	481
482	Cut July 13; bloom half turned	60.89	5.14	5.55	7.78	18.98	1.66	13.2	14.2	19.9	48.5	4.2	do	482
483	Cut Sept. 11; seed fully ripe	49.30	4.67	6.47	11.21	26.18	2.17	9.2	12.8	22.1	51.6	4.3	do	483
	All analyses: Maximum	82.03	5.14	7.69	14.81	26.18	2.17	13.2	29.5	34.7	51.6	4.7		
	All analyses: Minimum	49.30	1.78	3.50	2.54	7.87	0.49	6.7	10.3	12.9	27.6	1.9		
	All analyses: Average	**71.75**	**2.66**	**4.84**	**7.39**	**12.39**	**0.97**	**9.4**	**17.1**	**26.2**	**43.9**	**3.4**		
484	Black medick (*Medicago lupulina*)	78.52	1.37	3.40	6.31	9.29	1.11	6.4	15.8	29.3	43.4	5.1	Reference unknown	484
	Sainfoin, esparcette (*Onobrychis sativa*):													
485	Sown in drills 2 to 2½ feet apart; cut July 24; before bloom. *a*	77.10	3.86	4.63	5.92	7.85	0.64	16.8	20.2	26.0	34.3	2.7	Pa. Ex. Sta. Rep., 1887, p. 139	485
486	Sown in drills 2 to 2½ feet apart; cut Aug. 2; in bloom. *a*	73.22	2.09	3.60	4.87	15.20	1.02	7.8	13.4	18.2	56.7	3.9	do	486
	Serradella (*Ornithopus sativus*):													
487	In bloom	84.60	1.82	2.73	4.04	6.40	0.41	11.9	17.8	26.2	41.4	2.7	Mass. State Ex. Sta. Rep., 1887, p. 194	487
488	Time of cutting unknown	80.14	2.28	2.42	7.70	7.04	0.42	11.5	12.2	38.8	35.4	2.1	Mass. State Ex. Sta. Rep., 1887, p. 51	488
489	Cut Sept. 20 *h*	80.58	2.24	2.33	7.53	6.91	0.41	11.5	12.0	38.8	35.6	2.1	Mass. State Ex. Sta. Rep., 1887, p. 138	489
490	Cut July 24; before bloom *a h i j* ‖	85.79	5.78	2.14	1.96	3.93	0.40	40.7	15.0	13.8	27.7	2.8	Pa. Ex. Sta. Rep., 1887, p. 142	490
491	Cut Aug. 2; in bloom *a h i j* ‖	79.85	3.12	2.87	3.45	9.95	0.74	15.4	14.3	17.2	49.4	3.7	do	491

492	Cut Oct. 4; seed ripe; also still blooming. *a h i j*‖	65.60	4.16	3.55	7.78	17.08	1.83	12.1	10.3	22.6	49.7	5.3	do	492
493	Bokhara clover (*Melilotus alba*)	69.20	1.61	3.52	13.12	11.45	1.10	5.2	11.4	42.6	37.2	3.6	N. Y. State Ex. Sta. Rep., 1886, p. 365	493
494	Second crop; before bloom	80.55	1.27	3.04	6.79	7.22	1.13	6.5	15.6	34.9	37.2	5.8	do	494
495	Cut July 24 *a h i j*¶	80.48	2.25	4.15	3.62	8.55	0.95	11.5	21.2	18.7	43.8	4.8	Pa. Ex. Sta. Rep., 1887, p. 137	495
496	Cut Aug. 2 *a h i j*¶	76.01	1.80	2.77	6.56	12.07	0.79	7.5	11.6	27.3	50.3	3.3	do	496
497	Cut Oct. 4 *a h i j*¶	68.60	2.36	2.45	9.50	16.11	0.98	7.5	7.8	30.3	51.3	3.1	do	497
498	In bloom *c*	76.52	1.62	2.77	6.59	12.06	0.44	6.9	11.8	28.1	51.4	1.8	Mass. State Ex. Sta. Rep., 1889, p. 180	498
499	White lupine (*Lupinus albus*), in bloom	85.35	0.74	2.75	4.56	6.25	0.35	5.1	18.8	31.1	42.6	2.4	Mass. State Ex. Sta. Rep., 1885, p. 68	499
	Vetch (*Vicia sativa*):													
500	Cut Apr. 23; no sign of bloom *a*	87.10	1.66	4.77	1.54	4.39	0.54	12.9	37.0	11.9	34.0	4.2	U. S. Dept. Agr. Rep., 1880, p. 152	500
501	Cut May 4; in full bloom *a*	86.20	1.60	4.14	2.11	5.34	0.61	11.6	30.0	15.3	38.7	4.4	do	501
502	Cut May 21; in bloom and seed *a*	83.90	2.00	4.04	3.24	6.19	0.63	12.4	25.1	20.1	38.5	3.9	do	502
503	Cut Apr. 21; in full bloom *a h i j*	85.54	1.46	4.14	2.53	5.74	0.59	10.1	28.6	17.5	39.7	4.1	S. C. Ex. Sta. Rep., 1888, p. 130	503
504	Cut May 7; pods half developed *a h i j*	76.44	2.13	4.74	4.48	11.38	0.83	9.0	20.1	19.0	48.4	3.5	do	504
	Vetch with oats:													
505	One fourth vetch and three fourths oats sown. *h*	86.11	1.72	1.47	4.75	5.58	0.37	12.4	10.0	34.2	40.1	2.7	Mass. State Ex. Sta. Rep., 1887, p. 136	505
506	Dry crop contained one tenth vetch and nine tenths oats. *c*	73.36	3.30	2.82	9.11	10.68	0.73	12.4	10.6	34.2	40.1	2.7	Mass. State Ex. Sta. Rep., 1887, p. 50	506
507	Proportion of vetch and oats unknown	74.02	1.92	2.80	9.30	11.37	0.59	7.4	10.8	35.8	43.7	2.3	Mass. State Ex. Sta. Rep., 1888, p. 50	507
	Russian or hairy vetch (*Vicia villosa*):													
508	Cut July 24, before bloom *a h***	82.88	2.25	3.13	4.57	6.75	0.42	13.1	18.3	26.7	39.5	2.4	Pa. Ex. Sta. Rep., 1887, p. 140	508
509	Cut Aug. 2, in bloom *a h***	68.22	3.50	4.12	8.70	14.61	0.85	11.0	12.9	27.4	46.0	2.7	do	509
510	Cut Oct. 4; seed ripe; and also still blooming. *a h***	68.70	2.41	5.16	7.73	14.73	1.27	7.7	16.5	24.7	47.0	4.1	do	510
511	Time of cutting unknown	78.01	1.84	4.31	7.01	8.56	0.27	8.4	19.6	31.9	38.9	1.2	Mass. State Ex. Sta. Rep., 1889, p. 180	511
	Cowpea (*Dolichos*):													
512	Equal parts of black and yellow varieties	72.80	2.00	1.85	15.27	7.86	0.21	7.4	6.8	56.1	28.9	0.8	N. C. Ex. Sta. Rep., 1879, p. 115	512
513	Green and succulent	86.03	1.89	3.25	2.87	5.34	0.62	13.5	23.3	20.5	38.3	4.4	N. Y. State Ex. Sta. Rep., 1883, p. 18	513
514	Do	82.10	1.77	3.00	4.09	8.46	0.58	9.9	16.8	22.8	47.3	3.2	do	514
515	Do. *c*	80.62	1.16	1.66	4.46	11.75	0.35	6.0	8.6	23.0	60.6	1.8	Mass. State Ex. Sta. Rep., 1887, p. 50	515
516	Var. Clay, sown May 25, in drills; cut Sept. 2	78.81	1.27	1.76	4.88	12.90	0.38	6.0	8.3	23.0	60.9	1.8	Mass. State Ex. Sta. Rep., 1887, p. 139	516
517	Do	80.45	1.45	3.51	5.06	9.02	0.51	7.4	18.0	25.9	46.1	2.6	Mass. State Ex. Sta. Rep., 1888, p. 51	517
518	Cut Aug. 21; planted in spring same year *h*	85.30	2.65	3.06	3.12	5.38	0.49	18.0	20.8	21.2	36.7	3.3	Wis. Ex. Sta. Rep., 1888, p. 140	518
519	Time of cutting unknown	93.09	1.70	1.52	1.71	1.76	0.22	24.7	22.0	24.8	25.3	3.2	Md. Ex. Sta. Rep., 1888, p. 68	519
520	Do. *a*	87.13	1.75	1.97	3.41	5.29	0.45	13.6	15.2	26.5	41.3	3.4	do	520
521	Do. *a*	89.18	1.78	1.99	2.95	3.66	0.44	16.5	18.4	27.4	33.6	4.1	do	521
	Maximum	93.09	2.65	3.51	15.27	12.90	0.62	24.7	23.3	56.1	60.9	4.4		
	Minimum	72.80	1.16	1.52	1.71	1.76	0.21	6.0	6.8	20.5	25.3	0.8		
	Average	**83.55**	**1.74**	**2.36**	**4.78**	**7.14**	**0.43**	**10.5**	**14.3**	**29.0**	**43.6**	**2.6**		
522	Soja bean (*Soja hispida*)	69.35	2.36	3.94	8.91	14.39	1.05	7.7	12.9	29.1	46.9	3.4	N. Y. State Ex. Sta. Rep., 1882, p. 24	522
523	Do	69.85	2.22	3.88	8.26	14.24	1.55	7.4	12.9	27.4	47.2	5.1	do	523

* In *loc cit.*, analysis and yield compared with that of clover. † Sown April 28, in drills. ‡ Sown three years before. § Sown May 17, in drills.
‖ Harvested same year as sown. ¶ Harvested same year as sown; did not bloom. ** Sown May 20 in drills.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	LEGUMES—continued.	%	%	%	%	%	%	%	%	%	%	%		
524	Soja bean (*Soja hispida*)	70.41	2.58	2.20	7.93	16.01	0.87	8.7	7.4	26.8	54.2	2.9	N. Y. State Ex. Sta. Rep., 1883, p. 150	524
525	2½ feet high *a*	81.16	2.38	2.88	7.08	5.78	0.72	12.4	15.3	37.7	30.8	3.8	Md. Ex. Sta. Rep., 1888, p. 68	525
526	3 feet high *a*	80.99	2.20	2.26	5.86	7.97	0.72	11.6	11.9	30.8	41.9	3.8	do	526
527	3 feet high; grown on poorer soil than last *a*	77.37	2.51	2.78	5.59	10.82	0.93	11.1	12.3	24.7	47.8	4.1	do	527
528	Frosted *a*	62.29	2.60	4.60	12.52	16.78	1.21	6.9	12.2	33.2	44.5	3.2	do	528
	All analyses, excluding No. 528: Maximum	81.16	2.58	3.94	8.91	16.01	1.55	12.4	15.3	37.7	54.2	5.1		
	All analyses, excluding No. 528: Minimum	69.35	2.20	2.20	5.59	5.78	0.72	6.9	7.4	24.7	30.8	2.9		
	All analyses, excluding No. 528: Average	**74.85**	**2.38**	**2.99**	**7.27**	**11.54**	**0.97**	**9.5**	**12.0**	**29.0**	**45.7**	**3.8**		
	OTHER FORAGE PLANTS.													
529	Prickly comfrey (*Symphytum officinale*)	86.14	2.56	3.25	2.00	5.68	0.37	18.5	23.4	14.4	41.0	2.7	N. Y. State Ex. Sta. Rep., 1884, p. 330	529
530	Beginning to bloom *a d e*	88.24	1.64	1.88	2.66	5.27	0.81	13.9	16.0	22.7	44.7	2.7	N. Y. State Ex. Sta. Rep., 1887, p. 422	530
531	Stage of growth unknown	78.70	3.16	3.69	3.19	10.42	0.84	14.8	17.3	15.0	48.9	4.0	do	531
532	Planted in rows 4 feet apart, 3 feet between the hills; cut in August.	88.69	2.97	2.32	1.32	4.49	0.21	26.3	20.5	11.7	39.7	1.8	Wis. Ex. Sta. Rep., 1888, p. 139	532
533	In bloom; much adhering dirt; cut after a rain. *a h i j*	95.63	1.04	1.21	0.41	1.56	0.15	23.9	27.7	9.5	35.5	3.4	S. C. Ex. Sta. Rep., 1888, p. 133	533
534	Cut Sept. 15; young growth; cut previously Aug. 10.	86.62	3.60	3.35	1.27	4.81	0.35	26.9	25.0	9.5	40.0	2.6	Vt. Ex. Sta. Rep., 1888, p. 74	534
535	Cut Sept. 17; first cutting since plants were set out.	85.53	3.27	3.61	1.44	5.72	0.43	22.9	24.9	9.9	39.3	3.0	do	535
536	First cutting *h i j**	90.81	1.55	2.48	1.15	3.75	0.26	16.9	27.0	12.5	40.8	2.8	Pa. Ex. Sta. Bul. 6, 1888, p. 15	536
537	Second cutting *h i j**	90.38	1.62	2.68	1.23	3.84	0.25	16.8	27.9	12.8	39.9	2.6	do	537
538	Third cutting *h i j**	88.64	1.80	1.96	1.28	6.05	0.27	15.8	17.3	11.3	53.2	2.4	do	538
539	First crop, cut in bloom *a h i j*	91.70	1.25	1.78	1.11	3.95	0.21	15.0	21.5	13.4	47.6	2.5	Wis. Ex. Sta. Rep., 1889, p. 207	539
540	Second crop, cut when seed stalks appeared. *a h i j*	88.67	2.12	1.67	2.48	4.89	0.17	18.7	14.8	21.9	43.2	1.4	do	540
541	Third crop, cut when seed stalks appeared. *a h i j*	91.73	1.36	1.11	1.18	4.31	0.31	16.5	13.4	14.3	52.1	3.7	do	541
542	Fourth crop, cut when seed stalks appeared. *a h i j*	85.62	2.72	2.40	1.49	7.41	0.36	18.9	16.7	10.4	61.5	2.5	do	542
	Russian spurry (*Spergula maxima*):													
543	Cut July 24, in seed; sown same year *a h i j*	75.70	4.01	1.96	4.89	12.65	0.79	16.5	8.1	20.1	52.0	3.3	Pa. Ex. Sta. Rep., 1887, p. 141	543

544	Cut Aug. 2, in seed; sown same year *a h i j*	58.68	5.02	4.59	6.79	22.79	2.13	12.1	11.1	16.4	55.2	5.2	do	544
545	White mustard (*Sinapis alba*), sown May 3 in rows 1 foot apart; cut June 14; in full bloom. *h i j*	84.19	4.08†	4.34	2.04	4.84	0.51	25.7	27.3	12.9	30.9	3.2	Pa. Ex. Sta. Bul. 6, 1889	545
546	Japanese buckwheat, cut Oct. 4, after two hard frosts.	63.37	3.60	4.64	7.96	19.55	0.88	9.8	12.6	21.7	53.5	2.4	Vt. Ex. Sta. Rep., 1888, p. 74	546
547	Dandelion (*Taraxicum officinale*)	85.54	1.99	2.81	1.52	7.45	0.69	13.8	19.4	10.5	51.5	4.8	Bussey Inst. Bul., 1877, p. 117	547
548	Nettle (*Urtica dioica*)	82.44	2.30	5.50	1.96	7.13	0.67	13.1	31.4	11.2	40.5	3.8	Bussey Inst. Bul., 1877, p. 119	548
549	Plantain (*Plantago major*)	81.44	2.16	2.65	2.09	11.19	0.47	11.7	14.3	11.3	60.2	2.5	Bussey Inst. Bul., 1877, p. 123	549
550	Purslane (*Portulaca oleracea*)	92.61	1.56	2.24	1.03	2.16	0.40	21.1	30.2	13.9	29.4	5.4	Bussey Inst. Bul., 1877, p. 126	550
551	Pigweed (*Chenopodium album*)	80.80	3.02	3.94	2.55	8.93	0.76	15.7	20.5	13.3	46.5	4.0	Bussey Inst. Bul., 1877, p. 127	551
	Horsetail, scouring rush (*Equisetum arvense*):													
552	Fertile stems	87.28	1.60	1.86	1.87	7.05	0.34	12.7	14.8	14.8	55.0	2.7	Bussey Inst. Bul., 1878, p. 167	552
553	Sterile stems	85.63	1.74	3.34	2.49	6.04	0.76	12.2	23.3	17.2	42.0	5.3	do	553
554	Spanish moss (*Tillandsia usneoides*)	60.80	1.05	1.75	12.78	22.62	1.00	2.7	4.4	32.6	57.7	2.6	Mass. State Ex. Sta. Rep., 1889, p. 145	554
	LEAVES AND TOPS.													
	Beet tops:													
555	Dewing Blood Turnip; entire plant; collected June 2; height, 9.9 inches. *a*	90.12	2.85	2.32	0.71	3.46	0.54	28.8	23.5	7.2	35.0	5.5	U. S. Dept. Agr. Rep., 1883, p. 237	555
	Dewing Blood Turnip, tops; collected—													
556	June 9; height 3.5 inches; weight of one, 0.03 pound; for analysis of root, see No. 1470 *a*	90.04	2.63	2.55	0.83	3.32	0.63	26.4	25.6	8.4	33.3	6.3	do	556
557	June 19; height, 14.2 inches; weight of one, 0.07 pound; for analysis of root, see No. 1471. *a*	91.91	1.97	1.74	0.61	3.34	0.43	24.4	21.5	7.5	41.3	5.3	do	557
558	June 26; height, 10.6 inches; weight of one, 0.11 pound; for analysis of root, see No. 1472. *a*	89.57	2.76	2.00	0.89	4.21	0.57	26.5	19.1	8.6	40.3	5.5	do	558
559	July 3; height, 13 inches; weight of one, 0.32 pound; for analysis of root, see No. 1473, *a*	92.63	1.88	1.26	0.56	3.34	0.33	25.5	17.0	7.8	45.3	4.4	do	559
560	July 10; height, 13.8 inches; weight of one, 0.25 pound; for analysis of root, see No. 1474. *a*	85.51	3.43	2.95	1.19	6.27	0.65	23.7	20.3	8.2	43.3	4.5	do	560
561	July 24; height, 11.8 inches; weight of one, 0.23 pound; for analysis of root, see No. 1475. *a*	81.93	4.54	3.26	1.41	7.98	0.88	25.1	18.0	7.7	44.3	4.9	do	561
562	Aug. 15; height, 10.2 inches; weight of one, 0.12 pound; for analysis of root, see No. 1476. *a*	87.83	2.86	2.44	1.00	5.20	0.67	23.5	20.1	8.2	42.7	5.5	do	562
563	Oct. 25; weight of one, 0.06 pound; for analysis of root, see No. 1477. *a*	81.97	3.81	3.87	1.52	8.07	0.76	21.1	21.4	8.4	44.3	4.8	do	563
	Carrot tops:													
564	Early Long Orange, entire plant, collected June 2; height, 10.2 inches. *a*	85.10	3.57	3.45	0.96	6.23	0.69	23.9	23 1	6.5	41.9	4.6	U. S. Dept. Agr. Rep., 1883, p. 239	564
	Early Long Orange, tops; collected—													
565	June 9; for analysis of root, see No. 1522. *a*	85.70	2.96	3.38	1.16	6.42	0.38	20.7	23.7	8.1	44.9	2.6	do	565

* Roots set out in rows 3 feet apart and from 1 to 1½ feet in the row.

† Including sand, 1.83.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GREEN FODDER—Continued.													
	LEAVES AND TOPS—continued.													
	Carrot tops—Continued.													
	Early Long Orange, tops; collected—	%	%	%	%	%	%	%	%	%	%	%		
566	June 19; height, 10.6 inches; average weight of one, 0.01 pound; for analysis of root, see No. 1523. *a*	82.10	3.23	3.82	1.36	8.73	0.76	18.1	21.3	7.6	48.7	4.3	U. S. Dept. Agr. Rep., 1883, p. 239	566
567	June 26; height, 11 inches; average weight of one, 0.02 pound; for analysis of root, see No. 1524. *a*	81.60	3.21	3.85	1.78	8.55	1.01	17.5	20.9	9.7	46.4	5.5	do	567
568	July 3; height, 11 inches; average weight of one, 0.10 pound; for analysis of root, see No. 1525. *a*	81.70	2.96	3.46	1.56	9.41	0.91	16.2	18.9	8.5	51.4	5.0	do	568
569	July 10; height, 14 inches; average weight of one, 0.11 pound; for analysis of root, see No. 1526. *a*	83.40	3.00	3.04	1.35	8.43	0.73	18.1	18.3	8.2	51.0	4.4	do	569
570	July 20; height, 15 inches; average weight of one, 0.14 pound; for analysis of root, see No 1527. *a*	81.80	3.09	3.38	1.52	9.44	0.77	16.9	18.6	8.4	51.9	4.2	do	570
571	Oct. 15; height, 16 inches; average weight of one, 0.26 pound; for analysis of root, see No. 1528. *a*	82.40	3.20	2.83	1.60	10.03	0.94	17.2	15.2	8.6	53.9	5.1	do	571
572	Oct. 26; height, 14.2 inches; average weight of one, 0.57 pound; for analysis of root, see No. 1529. *a*	85.40	2.47	2.39	1.68	7.38	0.68	16.9	16.4	11.5	50.5	4.7	do	572
573	Danvers, tops	76.79	3.23	4.66	3.16	11.70	0.46	13.9	20.1	13.6	50.4	2.0	Mass. State Ex. Sta. Rep., 1889, p. 182	573
	Onion tops:													
	Giant Della Rocca, entire plant; collected—													
574	June 2; height, 5.5 inches *a*	89.79	2.22	2.27	1.04	4.05	0.63	21.8	22.2	10.2	39.7	6.1	U. S. Dept. Agr. Rep., 1883, p. 240	574
575	June 15; height, 13.8 inches *a*	90.71	0.94	1.87	1.14	4.67	0.67	10.2	20.2	12.2	50.2	7.2	do	575
576	June 23; height, 13.8 inches *a*	91.13	1.41	1.72	1.40	3.64	0.70	15.9	19.3	15.8	41.1	7.9	do	576
	Giant Della Rocca, tops; collected—													
577	June 29; height, 14.2 inches; for analysis of bulb, see No. 1537. *a*	91.48	1.28	1.80	1.60	3.26	0.58	15.0	21.2	18.8	38.2	6.8	do	577
578	July 10; height, 11.4 inches; for analysis of bulb, see No. 1538. *a*	91.18	1.34	1.78	0.97	4.23	0.50	15.1	20.2	11.0	48.0	5.7	do	578
579	July 26; height, 11.8 inches; for analysis of bulb, see No. 1539. *a*	90.30	1.64	1.80	1.24	4.81	0.21	16.8	18.6	12.8	49.6	2.2	do	579
	Average of Nos. 577 to 579	90.99	1.42	1.79	1.27	4.10	0.43	15.8	19.9	14.1	45.4	4.8		

	Spruce needles (*Abies excelsa*), collected—													
580	June 1 *a*	80.60	1.05	2.41	3.29	9.67	2.98	3.4	12.4	17.0	49.8	15.4	U. S. Dept. Agr. Rep., 1883, p. 241	580
581	June 6 *a*	77.00	0.96	2.38	4.82	12.05	2.79	4.2	16.4	29.0	52.3	12.1	do	581
582	June 16 *a*	75.40	0.99	2.07	7.88	11.06	2.60	4.0	8.4	32.1	44.9	16.6	do	582
583	June 23 *a*	71.60	1.24	2.52	7.77	13.68	3.19	4.4	8.9	27.4	48.1	11.2	do	583
584	July 6 *a*	67.20	0.94	3.00	8.90	16.08	3.88	2.8	9.2	22.1	49.1	11.8	do	584
585	July 15 *a*	64.30	1.63	2.76	8.89	19.08	3.34	4.5	7.7	24.9	53.5	9.4	do	585
586	Aug. 16 *a*	68.70	1.57	2.42	8.57	15.64	3.20	5.0	7.5	27.4	49.9	16.2	do	586
587	Oct. 20 *a*	56.70	2.32	4.19	10.38	21.94	4.47	5.4	9.7	23.9	50.7	10.3	do	587
	Maple leaves (*Acer dasycarpum*), collected—													
588	June 16 *a*	67.50	1.86	5.58	4.34	14.82	5.90	5.7	17.1	13.4	45.6	18.2	U. S. Dept. Agr. Rep., 1883, p. 242	588
589	June 23 *a*	68.10	2.17	5.70	3.12	15.34	5.57	6.8	17.9	9.8	48.0	17.5	do	589
590	July 6 *a* †	62.30	2.24	6.69	3.17	19.79	5.11	6.6	16.1	8.4	52.4	17.1	do	590
591	July 15 *a*	73.50	1.68	4.45	1.95	15.06	3.37	6.4	17.0	7.3	56.6	12.7	do	591
592	Aug. 16 *a*	75.76	2.05	3.47	2.53	13.29	2.96	8.5	14.2	10.4	54.7	12.2	do	592
593	Oct. 20 *a*	69.46	2.58	3.26	3.31	15.14	6.37	8.4	16.5	10.8	49.5	20.8	do	593
	SILAGE.													
	Corn (maize) silage:													
594	Particulars unknown	80.70	1.77	1.56	6.43	8.92	0.62	9.2	8.1	33.3	46.2	3.2	Agr. of Mass., 1880, p. 166	594
595	Do	77.40	1.00	1.62	6.85	13.05	0.68	4.4	4.5	36.3	57.8	3.0	N. J. Ex. Sta. Rep., 1881, p. 55	595
596	Do	78.51	1.53	0.88	6.43	12.63	0.62	7.1	4.1	29.9	56.6	2.9	do	596
597	Do	80.86	1.00	1.27	5.47	10.73	0.67	5.2	6.6	28.6	56.1	3.5	do	597
598	Do	82.16	1.62	1.21	5.34	9.62	0.71	5.7	7.2	29.8	53.8	3.5	do	598
599	Do	83.42	1.53	0.98	5.17	8.05	0.85	9.2	5.9	27.2	52.6	5.1	do	599
600	Do	83.56	0.84	0.88	5.76	8.23	0.73	5.1	5.4	35.1	50.6	4.4	do	600
601	Do	83.54	1.40	1.06	5.85	7.65	0.50	8.5	6.4	35.4	46.7	3.0	do	601
602	Do	84.28	1.26	1.37	4.68	7.91	0.50	8.6	8.7	29.8	50.3	3.2	do	602
603	Do	84.87	0.98	1.06	5.61	7.63	0.45	6.5	7.0	37.1	46.4	3.0	do	603
604	Do	74.15	1.82	1.94	7.86	13.36	0.87	7.6	7.4	30.5	51.7	3.4	do	604
605	Do	79.51	0.95	1.50	6.54	10.87	0.63	4.6	7.3	31.9	53.1	3.1	do	605
606	Do	80.64	1.18	1.63	6.31	10.28	0.56	5.9	8.2	31.6	51.5	2.8	do	606
607	Do	81.95	1.63	1.78	5.11	8.90	0.63	9.0	9.9	28.4	49.2	3.5	do	607
608	Do	83.81	1.68	1.63	4.99	7.74	0.75	6.7	10.6	36.8	47.9	4.6	do	608
609	Do	83.52	1.43	0.94	5.18	8.28	0.65	8.7	5.7	32.0	49.7	3.9	do	609
610	Do	82.09	1.04	1.27	5.76	9.50	0.34	5.8	7.1	32.1	53.1	1.9	Conn. State Ex. Sta. Rep., 1881, p. 89	610
611	Do	74.16	1.48	2.77	7.04	12.87	1.74	5.8	10.7	27.2	49.6	6.7	U. S. Dept. Agr., 1881–'82, p. 572	611
612	Do	77.30	2.01	1.94	5.71	11.24	1.80	8.9	8.5	25.2	49.5	7.9	do	612
613	Do	72.12	2.19	1.95	10.02	12.95	0.77	7.8	7.6	35.9	46.5	2.8	N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41	613
614	Silage of No. 52, planted in hills as usual for crop of grain.	82.38	1.05	1.39	4.80	9.96	0.42	6.0	7.9	27.2	56.6	2.3	Conn. State Ex. Sta. Rep., 1882, p. 100	614
615	Silage of No. 53, planted in drills thickly	87.68	0.91	1.38	4.04	5.62	0.37	7.4	11.3	32.8	45.5	3.6	do	615
616	Particulars unknown	77.65	1.78	2.61	6.02	11.99	0.55	8.0	9.6	27.0	53.6	2.4	Conn. State Ex. Sta. Rep., 1882, p. 102	616
617	Do	74.70	1.95	1.75	7.86	13.47	0.27	7.7	6.9	31.1	53.2	1.1	N. J. Ex. Sta. Rep., 1882, p. 86	617
618	Silage of No. 32	78.67	1.66	1.23	5.27	12.02	1.13	7.8	5.8	24.7	56.4	5.3	Rep. of Expts. at Univ. Wis., 1882, p. 85	618
619	Do	76.12	1.65	0.90	6.24	14.23	0.87	6.9	3.8	26.1	59.5	3.7	do	619
620	Silage of No. 54 ‡	75.10	1.58	1.84	6.23	13.93	0.31	6.3	7.4	25.6	56.1	1.2	N. J. Ex. Sta. Rep., 1883, p. 75	620
621	Do §	77.83	1.43	1.61	5.71	12.27	0.26	6.4	7.3	25.8	55.1	1.2	do	621
622	Do. *b*	72.48	1.47	1.86	7.16	16.49	0.54	5.3	6.8	26.0	59.9	2.0	N. J. Ex. Sta. Rep., 1884, p. 106	622

* Adds 101 (fresh or air-dry material).
† Adds 98.76 (fresh or air-dry material).
‡ Adds 99.64 (fresh or air-dry material).
§ Adds 99.11 (fresh or air-dry material).

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	SILAGE—Continued.													
	Corn (maize) silage—Continued.	%	%	%	%	%	%	%	%	%	%	%		
623	Particulars unknown	72.92	1.69	1.76	7.28	15.65	0.71	6.2	6.5	27.0	57.7	2.6	N. J. Ex. Sta. Rep., 1884, p. 106	623
624	Do. *b*	87.16	1.64	1.81	4.00	5.12	0.27	12.8	14.1	31.1	39.9	2.1	do	624
625	Do. *b*	83.18	1.27	1.77	5.21	8.20	0.37	7.5	10.6	31.0	48.7	2.2	do	625
626	Do. *b*	81.02	1.33	1.71	5.45	10.17	0.32	7.0	9.0	28.8	53.5	1.7	do	626
627	Do. *b*	75.77	1.41	1.74	6.47	14.34	0.27	5.8	7.2	26.7	59.2	1.1	do	627
628	Do. *b*	70.76	1.49	1.71	7.34	18.40	0.30	5.1	5.8	25.1	63.0	1.0	N. J. Ex. Sta. Rep., 1884, p. 107	628
629	Do. *b*	71.86	1.24	1.72	7.35	17.51	0.32	4.4	6.1	26.2	62.2	1.1	do	629
630	Do. *b*	81.62	1.59	1.52	5.58	9.45	0.24	8.6	8.3	30.4	51.4	1.3	do	630
631	Do. *b*	82.05	1.44	1.52	4.93	9.83	0.23	8.0	8.5	27.4	54.8	1.3	do	631
632	From frosted maize	85.42	2.94*	1.75	4.17	5.40	0.32	20.2	12.0	28.6	37.0	2.2	Conn. State Ex. Sta. Rep., 1884, p. 110	632
633	From maize that suffered from drouth	83.04	1.22	0.95	6.09	8.06	0.64	7.2	5.6	35.9	47.5	3.8	do	633
634	Particulars unknown	78.61	1.50	1.60	7.10	10.22	0.97	7.0	7.5	33.2	47.8	4.5	N. Y. State Ex. Sta. Rep., 1884, p. 47	634
635	Do	82.35	1.05	0.87	5.87	8.72	1.14	6.0	4.9	33.3	49.4	6.4	do	635
636	Do	84.58	0.91	1.13	5.01	7.22	1.15	5.9	7.3	32.5	46.9	7.4	do	636
637	From corn in tassel	86.88	0.91	1.65	4.42	5.63	0.52	6.9	12.5	33.7	43.0	3.9	Mass. State Ex. Sta. Bul. 10, 1884	637
638	Particulars unknown	87.68	0.91	1.38	4.04	5.62	0.37	7.4	11.2	32.8	45.6	3.0	Ala. Ex. Sta. Bul. 3, 1884	638
639	From Clark variety; cut before putting into silo in pieces 1½ to 1½ inches long.	81.88	0.92	1.42	4.75	10.40	0.63	5.1	7.8	26.2	57.4	3.5	Mass. State Ex. Sta. Rep., 1885, p. 19	639
640	Same crop as No. 639, but put into silo without cutting.	83.18	0.71	1.51	4.96	9.02	0.62	4.2	9.0	29.4	53.7	3.7	Mass. State Ex. Sta. Rep., 1885, p. 20	640
641	Particulars unknown	81.49	1.25	1.02	5.74	10.17	0.33	6.7	5.5	31.0	55.0	1.8	Wis. Ex. Sta. Rep., 1886, p. 96	641
642	In first silk	83.17	1.31	2.06	5.11	7.07	1.28	7.8	12.3	30.4	41.9	7.6	Ky. Ex. Sta. Bul. 5, 1886	642
643	Particulars unknown	82.78	1.34	1.57	5.22	8.36	0.73	7.8	9.1	30.3	48.5	4.3	do	643
644	Do	86.98	0.67	0.72	5.11	5.90	0.62	5.1	5.5	39.3	45.4	4.7	N. Y. State Ex. Sta. Rep., 1886, p. 365	644
645	Do	86.07	0.68	0.77	2.98	8.98	0.52	4.9	5.5	21.3	64.6	3.7	do	645
646	Do	86.25	0.94	0.93	4.79	6.42	0.67	6.9	6.8	34.8	46.6	4.9	do	646
647	Silo filled at intervals during 8 days without exclusion of air, then covered.	78.05	0.69	1.62	4.50	14.30	0.84	3.2	7.4	20.5	65.1	3.8	Mass. State Ex. Sta. Rep., 1886, p. 63	647
648	Same maize as No. 647, but filled and covered at once.	76.90	1.21	1.91	4.08	15.17	0.73	5.2	8.3	17.7	65.7	3.1	do	648
649	Silage of No. 19, Clark variety *c*	71.60	0.95	2.21	5.26	18.26	1.72	3.3	7.8	18.5	64.3	6.1	Mass. State Ex. Sta. Rep., 1887, p. 93	649
650	From field-cured stover; put into silo before frosts; allowed to heat 4 days before weighting.	80.06	1.49	1.50	6.10	9.87	0.98	7.5	7.6	30.5	49.5	4.9	Vt. Ex. Sta. Rep., 1887, p. 125	650
651	Same as No. 650, except was weighted as soon as filled.	80.07	1.28	1.40	5.65	10.65	0.95	6.4	7.0	28.4	53.4	4.8	do	651

652	Variety unknown	64.42	1.74	2.82	7.18	22.24	1.58	4.9	7.9	20.2	62.5	4.5	Ill. Ex. Sta. Bul. 2, 1888, p. 21	652
653	Do. *a*	74.94	2.61	2.04	7.51	12.26	0.64	10.4	8.1	30.0	48.9	2.5	La. Ex. Sta. Bul. 17, 1888, p. 131	653
654	Stowell Evergreen corn, cut and put into silo when kernels were just past the milk.	78.88	1.33	1.89	5.44	11.77	0.69	6.3	8.9	25.8	55.7	3.3	Mass. State Ex. Sta. Rep., 1888, p. 86	654
655	Southern White, cut and put into silo when kernels were just past the milk.	83.48	0.71	1.14	5.83	8.30	0.54	4.3	6.9	35.3	50.2	3.3	do	655
656	Variety unknown	77.24	1.12	2.20	4.70	14.02	0.72	4.9	9.7	20.7	61.5	3.2	Mass. State Ex. Sta. Rep., 1888, p. 37	656
657	Southern White, cut when tassels began to appear.	79.19	2.01	1.58	7.61	8.83	0.78	9.6	7.6	36.6	42.4	3.8	Reference unknown	657
658	Used in feeding experiments. *a*	77.94	1.71	1.92	5.92	11.71	0.80	7.7	8.7	28.8	53.2	3.6	Wis. Ex. Sta. Rep., 1888, p. 31	658
659	Yellow dent, well preserved, sweet *a* †	74.13	1.86	2.98	5.57	14.10	1.36	7.2	11.5	21.5	54.5	5.3	Wis. Ex. Sta. Rep., 1888, p. 85	659
660	Yellow dent, average of 6 samples taken Nov. 3 to Dec. 30; silage of No. 81; quality good in first sample, poor in last. *a* †	70.62	2.59	2.70	9.68	13.69	0.72	8.8	9.2	32.9	46.7	2.4	do	660
661	Yellow dent, dry silage; average of 4 samples taken Jan. 27 to Mar. 8; silage of No. 741; quality fair to good. *a* †	30.76	4.38	6.18	21.48	35.84	1.36	6.3	8.9	31.0	51.8	2.0	do	661
662	Wisconsin White Dent, quality very good *a* †	78.45	1.84	1.86	5.83	11.02	1.00	8.5	8.6	27.0	51.3	4.6	do	662
663	Wisconsin White Dent, sweet; ¾ maize, ¼ rye straw. *a* †	80.55	1.41	2.11	7.24	7.46	1.23	7.2	10.8	37.2	38.4	6.4	do	663
664	Large, sweet corn; average of 5 samples taken Nov. 16 to Jan. 12; silage of Nos. 129, 130; very fine, aromatic. *a* †	77.94	2.02	1.90	5.87	11.48	0.79	9.2	8.6	26.6	52.0	3.6	do	664
665	Large, sweet corn; average of 5 samples taken Feb. 7 to Mar. 5; silage of No. 131; quality good in first sample, poor in last. *a* †	68.32	3.33	2.87	9.35	14.98	1.25	10.5	9.0	29.4	47.1	4.0	do	665
666	Southern Sweet (Sheep-Tooth); put into silo Sept. 8, taken out Feb. 15; corn planted too thick for development of many ears; pleasant odor; relished by cattle. *a* †	73.85	3.11	3.62	7.65	11.25	0.52	11.9	13.9	29.2	43.0	2.0	do	666
667	Burrill & Whitman Southern Ensilage; average of 5 samples taken Jan. 14 to Feb. 15; silage of No. 82: quality very good. *a* †	82.67	1.83	1.73	6.89	6.23	0.65	10.6	9.9	39.7	36.1	3.7	do	667
668	Burrill & Whitman Southern Ensilage; put into silo Aug. 29 to Sept. 6 without cutting; average of 2 samples taken Mar. 12 and Apr. 2; silage of No. 82; quality very best. *a* †	82.72	1.87	1.39	6.94	6.29	0.79	10.8	8.1	40.2	36.3	4.6	do	668
669	Burrill & Whitman Southern Ensilage; put into silo Sept. 9 to 16 after cutting; taken out Feb. 15; kept perfectly, no waste. *a* †	79.90	1.48	2.66	6.82	7.76	1.38	7.4	13.2	33.9	38.6	6.9	do	669
670	Variety unknown	80.50	1.26	1.62	3.63	12.45	0.54	6.5	8.3	18.7	63.7	2.8	N. Y. State Ex. Sta. Rep., 1888, p. 237	670
	Burrill & Whitman Southern Ensilage dent, wilted:													
671	Cut Aug. 25 *a* ‡	81.00	1.29	1.91	5.84	9.06	0.90	6.8	10.1	30.7	47.7	4.7	Mich. Ex. Sta. Bul. 49, 1889	671
672	Cut Sept. 1 *a* ‡	77.70	1.68	2.05	6.32	11.26	0.99	7.5	9.2	28.3	50.5	4.5	do	672
673	Cut Sept. 8 *a* ‡	78.68	1.27	1.58	6.33	11.32	0.82	6.0	7.4	29.7	53.1	3.8	do	673

* 2.00 sand and clay. † In *loc. cit.*, lactic and acetic acid given. ‡ Plant in rows 3 feet 9 inches apart; stalks 10 inches apart.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	SILAGE—Continued.													
	Corn (maize) silage—Continued.													
	Burrill & Whitman Southern Ensilage dent, not wilted:	%	%	%	%	%	%	%	%	%	%	%		
674	Cut Aug. 27 *a**	84.00	1.05	1.50	5.17	7.56	0.72	6.6	9.4	32.3	47.2	4.5	Mich. Ex. Sta. Bul. 49, 1889	674
675	Cut Sept. 13 *a**	80.28	1.07	1.32	5.83	10.72	0.78	5.4	7.1	29.5	54.4	3.6	do	675
676	Whole corn *a*	80.39	1.05	1.56	6.54	10.07	0.39	5.4	8.1	33.4	51.1	2.0	Mo. Ex. Sta. Bul. 7, 1889	676
677	Field corn *a*	64.11	2.14	3.40	9.06	20.23	1.06	6.0	9.5	25.2	56.3	3.0	do	677
678	Sweet corn *a*	79.27	1.10	1.79	5.04	11.88	0.91	5.3	8.6	24.3	57.4	4.4	do	678
679	Sweet corn	74.56	0.27	2.07	5.11	16.34	1.65	1.1	8.1	20.1	64.2	6.5	Mass. State Ex. Sta. Rep., 1889, p. 34	679
680	Variety unknown	80.77	0.98	1.97	6.53	9.23	0.52	5.1	10.3	34.0	48.0	2.6	Mass. Ex. Sta. Rep., 1889, p. 143	680
681	Do	78.98	0.99	1.63	7.10	10.88	0.42	4.7	7.7	33.8	51.8	2.0	do	681
682	Do	79.73	0.65	1.52	5.76	11.61	0.73	3.2	7.5	28.4	57.3	3.6	do	682
683	Silo rapidly filled *a*	74.28	1.53	2.15	5.83	14.65	1.56	5.9	8.4	22.7	56.9	6.1	Pa. Ex. Sta. Bul. 9, 1889	683
684	Do. *a*	72.28	1.48	2.35	7.13	15.25	1.51	5.3	8.5	25.7	55.1	5.4	do	684
685	Silo slowly filled *a*	67.44	1.43	2.45	8.95	17.76	1.99	4.4	7.5	27.5	54.5	6.1	do	685
686	Do. *a*	71.07	1.43	2.34	7.10	16.41	1.65	5.0	8.1	24.6	56.6	5.7	do	686
687	Silo rapidly filled *a*	72.47	1.44	2.26	7.30	15.41	1.12	5.3	8.2	26.6	55.8	4.1	Wis. Ex. Sta. Rep., 1889, p. 73	687
688	Do. *a*	72.37	1.36	2.14	7.10	16.09	0.94	4.9	7.7	25.7	58.3	3.4	do	688
689	Sibley Sheep-Tooth	62.37	1.55	2.79	7.82	24.24	1.23	4.1	7.4	20.8	64.4	3.3	Wis. Ex. Sta. Rep., 1889, p. 108	689
690	Cross between Stowell Evergreen and 8-rowed variety.†	76.38	1.50	2.01	4.73	14.08	1.30	6.2	8.5	20.0	59.7	5.6	Mass. State Ex. Sta. Bul. 36, 1890	690
691	Common field corn	70.01	2.02	1.69	10.49	14.97	0.82	6.7	6.0	35.0	49.6	2.7	do	691
692	Eureka Ensilage	82.87	1.23	1.04	6.66	7.88	0.32	7.2	6.0	38.9	46.1	1.8	do	692
693	Southern White	75.36	1.53	1.60	7.44	13.44	0.63	6.3	6.5	30.2	54.4	2.6	do	693
694	Do	71.65	1.24	1.94	6.97	17.44	0.76	4.4	6.8	24.6	61.5	3.7	do	694
695	Stowell Evergreen	78.84	1.47	1.59	5.16	12.13	0.80	6.9	7.5	24.4	57.4	3.8	do	695
	All analyses, excluding Nos. 632, 661, and 663. Maximum	87.68	3.33	3.62	10.49	24.24	1.99	12.8	14.1	40.2	65.7	7.9		
	Minimum	62.37	0.27	0.72	2.98	5.12	0.23	1.1	3.8	17.7	36.0	1.0		
	Average	**79.10**	**1.38**	**1.67**	**5.99**	**11.07**	**0.79**	**6.6**	**8.0**	**28.6**	**53.0**	**3.8**		
	Silage of corn (maize), kernels:‡													
696	Flint, 3½ months in silo; well preserved; made from wilted fodder; slow filling (see No. 1784). *a*	39.85	0.57	4.58	1.09	50.02	3.89	0.9	7.6	1.8	83.2	6.5	Wis. Ex. Sta. Rep., 1888, p. 78	696
697	Flint, 4½ months in silo; well preserved; made from wilted fodder; slow filling (see No. 1784). *a*	40.89	1.33	5.59	1.05	47.39	3.75	2.2	9.5	1.8	80.2	6.3	do	697

698	Flint (King Philip), 3½ months in silo; very well preserved; made from fresh-cut fodder; rapid filling (see No. 1785). *a*	41.20	1.26	5.64	0.93	47.32	3.85	2.1	9.6	1.6	80.5	6.2	do	698
699	Flint, 4½ months in silo; good; made from cured fodder (see No. 1786). *a*	21.09	1.85	10.13	3.65	59.08	4.40	2.1	12.8	4.6	74.9	5.6	do	699
700	Dent (yellow), 4½ months in silo; ears much decayed; made from fresh-cut fodder; slow filling (see No. 1722). *a*	47.74	0.99	5.17	1.54	41.74	2.82	1.9	9.9	2.9	79.9	5.4	do	700
701	Dent, 4½ months in silo; ears much decayed (see No. 1723). *a*	54.43	0.69	4.86	1.23	35.67	3.12	1.5	10.7	2.7	78.3	6.8	do	701
702	Dent, 4½ months in silo; very well preserved; made from fresh-cut fodder; slow filling (see No. 1724). *a*	38.13	0.91	7.53	1.69	48.08	3.66	1.5	12.1	2.7	77.6	5.9	do	702
703	Dent, 4½ months in silo; very good; made from wilted fodder; slow filling (see No. 1725). *a*	48.80	0.59	4.89	0.80	41.88	3.04	1.2	9.5	1.6	81.8	5.9	do	703
704	Burrill & Whitman Southern Ensilage, 4 months in silo; very well preserved; made from fresh-cut fodder; slow filling (see No. 1726). *a*	45.46	0.66	4.87	1.51	44.00	3.50	1.2	8.9	2.8	80.7	6.4	do	704
	All analyses. Maximum	54.43	1.65	10.13	3.65	59.08	4.40	2.2	12.8	4.6	83.2	6.8		
	All analyses. Minimum	21.09	0.57	4.58	0.80	35.67	2.82	0.9	7.6	1.6	74.9	5.4		
	All analyses. Average	**41.33**	**0.99**	**5.97**	**1.52**	**46.62**	**3.57**	**1.7**	**10.2**	**2.6**	**79.4**	**6.1**		
	Average, flint varieties	**35.76**	**1.20**	**6.49**	**1.68**	**50.95**	**3.92**	**1.8**	**10.1**	**2.6**	**79.4**	**6.1**		
	Average, dent varieties	**46.91**	**0.77**	**5.46**	**1.35**	**42.28**	**3.23**	**1.4**	**10.3**	**2.5**	**79.7**	**6.1**		
705	Sorghum	77.60	1.13	0.94	6.08	13.85	0.42	5.1	4.2	27.0	61.8	1.9	N. J. Ex. Sta. Rep., 1883, p. 75	705
706	Do	74.92	1.19	0.66	6.53	16.51	0.19	4.7	2.6	26.0	66.0	0.7	N. J. Ex. Sta. Rep., 1884, p. 106	706
707	Do	76.65	0.79	0.58	5.90	15.90	0.20	3.4	2.4	25.3	68.0	0.9	do	707
708	Do	71.94	1.19	0.92	6.79	19.02	0.14	4.2	3.3	24.2	67.9	0.4	do	708
709	Do *b*	78.03	0.88	0.66	6.14	13.83	0.46	4.0	3.0	27.9	63.0	2.1	N. J. Ex. Sta. Rep., 1884, p. 107	709
710	Do	77.28	1.14	1.08	6.98	13.11	0.41	5.0	4.8	30.7	57.7	1.8	Mo. Ex. Sta. Bul. 7, 1889	710
	Maximum	78.03	1.19	0.94	6.79	19.02	0.46	5.1	4.8	30.7	68.0	2.1		
	Minimum	71.94	0.79	0.56	5.00	13.83	0.14	3.4	2.4	24.2	57.7	0.4		
	Average	**76.07**	**1.05**	**0.80**	**6.40**	**15.38**	**0.30**	**4.4**	**3.3**	**26.8**	**64.2**	**1.3**		
	Rowen from mixed grasses ensiled:													
711	In silo 11 months. For analysis of same crop sun-dried see No. 1392.	18.44	7.15	10.07	22.78	35.97	5.69	8.7	12.4	27.9	44.0	7.0	Mass. State Ex. Sta. Rep., 1886, p. 66	711
712	Put into silo Oct. 5, after several hard frosts; on top of 15 feet of corn silage; too ripe.	59.59	3.13	4.08	10.40	20.67	2.13	7.8	10.1	25.7	51.1	5.3	Vt. Ex. Sta. Rep., 1887, p. 124	712
713	Rye silage	80.75	1.62	2.42	5.76	9.18	0.27	8.4	12.6	30.0	47.6	1.4	N. J. Ex. Sta. Rep., 1883, p. 75	713

* Plant in rows 3 feet 9 inches apart; stalks 10 inches apart.
† Particulars given in *loc. cit.* as to manuring, distance of planting, time of harvesting, mode of cutting, and yield.
‡ In *loc. cit.*, lactic acid and acetic acid given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	SILAGE—Continued.	%	%	%	%	%	%	%	%	%	%	%		
714	Brewers' grains, ensiled	66.77	1.44	6.94	5.43	16.86	2.57	4.3	20.9	16.4	50.7	7.7	N. J. Ex. Sta. Rep., 1880, p. 46	714
715	Do	68.85	1.22	7.14	4.62	16.23	1.96	3.9	23.0	14.8	52.0	6.3	N. J. Ex. Sta. Rep., 1884, p. 107	715
716	Do	73.86	0.96	5.85	3.89	13.65	1.79	3.7	22.4	14.9	52.1	6.9	do	716
	Average	**69.82**	**1.21**	**6.64**	**4.65**	**15.61**	**2.07**	**4.0**	**22.0**	**15.4**	**51.7**	**6.9**		
717	Red clover silage	78.56	2.92	3.00	6.29	8.12	1.11	13.5	14.0	29.4	37.9	5.2	N. J. Ex. Sta. Rep., 1881, p. 55	717
718	Do	72.60	2.69	3.81	8.57	11.40	0.93	9.8	13.9	31.3	41.6	3.4	N. J. Ex. Sta. Rep., 1883, p. 75	718
719	Do	77.66	1.90	3.20	5.12	11.10	1.02	8.5	14.3	23.0	49.6	4.6	Wis. Ex. Sta. Rep., 1886, p. 99	719
720	Put into silo Sept. 6–8; taken out Mar. 5; quality good. *a*	61.39	2.95	5.89	13.90	14.28	1.59	7.6	15.3	36.0	37.0	4.1	Wis. Ex. Sta. Rep., 1888, p. 85	720
721	Put into silo October; taken out Mar. 31; quality good. *a*	69.52	2.56	5.07	8.01	13.72	1.12	8.4	16.6	26.3	45.0	3.7	do	721
	Maximum	78.56	2.95	5.89	13.90	14.28	1.59	13.5	16.6	36.0	49.6	5.2		
	Minimum	61.39	1.90	3.00	5.12	8.12	0.93	7.6	13.9	23.0	37.0	3.4		
	Average	**71.95**	**2.60**	**4.19**	**8.38**	**11.73**	**1.15**	**9.3**	**15.0**	**29.9**	**41.7**	**4.1**		
722	Cowpea vines, ensiled, var. Whip-poor-will	81.64	1.99	2.40	5.57	7.60	0.80	10.8	13.1	30.4	41.3	4.4	N. C. Ex. Sta. Rep., 1882, p. 138	722
723	Cabbage silage	87.61	4.16	1.19	1.59	4.52	0.93	33.6	9.6	12.8	36.5	7.5	Conn. State Ex. Sta. Rep., 1881, p. 89	723
724	Apple pomace silage	85.33	0.62	1.20	3.26	8.51	1.08	4.2	8.2	22.2	58.0	7.4	Mass. Ex. Sta. Rep., 1886, p. 67	724
	HAY AND OTHER DRIED COARSE FODDERS.													
	CORN (MAIZE) FODDER.													
	Corn (maize) fodder, cured:													
725	Variety unknown	14.96	5.95	3.39	25.36	49.16	1.18	7.1	4.0	29.9	57.6	1.4	N. J. Ex. Sta. Rep., 1880, p. 47	725
726	Do	14.84	4.47	5.76	25.93	47.55	1.45	5.3	6.8	30.4	55.8	1.7	Conn. State Ex. Sta. Rep., 1881, p. 88	726
727	Variety unknown, frost bitten	8.83	4.43	7.86	26.48	50.52	1.88	4.9	8.6	29.1	55.4	2.0	Mass. Bd. of Agr. Rep., 1883, p. 318	727
728	Variety unknown	6.67	4.76	5.76	31.51	50.16	1.04	5.1	6.2	33.8	53.8	1.1	Mass. Bd. of Agr. Rep., 1883, p. 320	728
729	Do	6.65	4.37	6.38	29.30	51.98	1.32	4.7	6.8	31.4	55.7	1.4	Mass. Bd. of Agr. Rep., 1883, p. 319	729
730	Do	16.23	6.43	4.29	23.27	48.20	1.58	7.2	5.1	27.9	47.9	1.9	Mo. State Agr. Col., Bul. 11, 1884	730
731	Do. *a*	7.12	4.34	9.76	16.29	59.91	2.46	4.7	10.5	17.6	64.5	2.7	Ill. Ex. Sta. Bul. 2, 1888	731
732	Pride of the North, cut Sept. 16; used in feeding experiments.	18.66	4.22	7.85	21.93	45.88	1.46	5.2	9.7	27.0	56.3	1.8	Wis. Ex. Sta. Rep., 1888, p. 31	732

733	Pride of the North; cut Sept. 16, cured at first one month in the field, then in the barn until March; No. 80 is same crop, freshcut; No.741 the same field-cured.	17.72	4.69	8.53	25.55	41.94	1.57	5.7	10.4	31.0	51.0	1.9	Wis. Ex. Sta. Rep., 1888, p. 85	733
734	Variety unknown	39.00	4.57	3.88	20.47	30.52	1.56	7.3	6.2	33.6	50.4	2.5	N. J. Ex. Sta. Rep., 1881, p. 52	734
735	Do	22.93	5.46	4.63	24.69	40.82	1.47	7.1	8.0	32.1	52.9	1.9	do	735
736	Do	39.37	4.83	3.84	18.65	32.85	0.66	7.6	6.3	30.8	54.2	1.1	N. J. Ex. Sta. Rep., 1882, p. 80	736
737	Do	38.63	3.95	4.59	21.27	30.95	0.61	6.3	7.3	34.7	50.7	1.0	N. J. Ex. Sta. Rep., 1883, p. 75	737
738	Do	24.85	4.48	6.83	14.39	47.80	1.65	6.0	9.1	19.2	63.5	2.2	Ill. Ex. Sta., Bul. 2, 1888	738
739	White-Edged Dent	24.39	2.26	6.02	21.08	44.38	1.87	2.9	7.9	28.0	58.8	2.4	Conn. Ex. Sta. Rep., 1888	739
740	Pride of the North, dent, cut when glazing *c*	24.87	3.86	6.22	16.72	46.36	1.97	5.1	8.3	22.3	61.7	2.6	Mass. Ex. Sta. Rep., 1888, p. 84	740
741	Pride of the North, dent; No. 80 same crop cut green; No. 733 same crop cured in barn.*	34.77	3.62	4.87	23.37	32.41	0.96	5.4	7.5	35.8	49.8	1.5	Wis. Ex. Sta. Rep., 1888, p. 85	741
742	Variety unknown	56.49	2.71	3.40	15.46	20.64	1.36	6.2	7.8	35.5	47.5	3.0	N. Y. Ex. Sta. Rep., 1885, p. 304	742
743	Do	51.52	3.74	3.51	19.18	20.90	1.11	7.8	7.2	39.6	43.1	2.3	do	743
	White-Edged Dent, 1,000 pounds ammoniated superphosphate per acre—													
744	One stalk in 4 feet *b h i j*†	60.17	1.74	4.01	8.35	24.50	1.23	4.4	10.1	21.0	81.4	3.1	Conn. Ex. Sta. Rep., 1889, p. 23	744
745	One stalk in 2 feet *b h i j*†	51.68	1.59	4.49	9.03	31.53	1.68	3.3	9.3	18.7	65.2	3.5	do	745
746	One stalk to a foot *b h i j*†	51.78	1.59	3.85	9.32	31.84	1.62	3.3	8.0	19.3	66.0	3.4	do	746
747	Two stalks to a foot *b h i j*†	46.47	1.73	4.01	10.38	35.59	1.82	3.2	7.5	19.4	66.5	3.4	do	747
748	Four stalks to a foot *b h i j*†	51.71	1.55	3.06	11.84	30.65	1.19	3.2	6.3	24.5	63.6	2.4	do	748
749	Eight stalks to a foot *b h i j*†	53.08	1.47	2.72	12.52	29.19	1.02	3.1	5.8	26.7	62.2	2.2	do	749
	White-Edged Dent, 2,000 pounds ammoniated superphosphate per acre—													
750	Two stalks to a foot *b h i j*†	50.95	1.66	3.83	9.73	32.23	1.60	3.4	7.8	19.8	65.7	3.3	do	750
751	Four stalks to a foot *b h i j*†	55.23	1.66	2.94	11.39	27.61	1.17	3.7	6.6	25.5	61.6	2.6	do	751
	Rhode Island White Cap (flint), 1,000 pounds ammoniated superphosphate per acre—													
752	One stalk in 4 feet *b h i j*†	51.61	1.98	5.42	8.03	31.29	1.67	4.1	11.2	16.6	64.7	3.4	do	752
753	One stalk in 2 feet *b h i j*†	49.82	1.77	5.64	7.47	33.49	1.81	3.5	11.3	14.9	66.7	3.6	do	753
754	One stalk to a foot *b h i j*†	43.36	2.01	5.22	10.18	37.22	2.01	3.6	9.2	18.0	65.7	3.5	do	754
755	Two stalks to a foot *b h i j*†	47.22	1.89	5.07	8.03	35.73	2.06	3.6	9.6	15.2	67.7	3.9	do	755
756	Four stalks to a foot *b h i j*†	44.02	1.97	4.60	9.96	37.37	2.08	3.5	8.2	17.8	66.8	3.7	do	756
757	Eight stalks to a foot *b h i j*†	47.22	1.85	3.62	12.65	33.25	1.41	3.5	6.9	24.0	62.9	2.7	do	757
758	White-Edged Dent, 1,000 pounds ammoniated superphosphate per acre—	42.93	2.17	4.18	13.04	35.95	1.73	3.8	7.3	22.6	63.1	3.2	do	758
759	One stalk in 4 feet *b h i j*‡	37.90	2.20	5.40	11.70	40.80	2.00	3.6	8.7	18.8	85.7	3.2	Conn. Ex. Sta. Rep., 1889, p. 222	759
760	One stalk in 2 feet *b h i j*‡	37.10	2.10	5.00	11.60	42.00	2.20	3.3	7.9	18.4	66.9	3.5	do	760
761	One stalk to a foot *b h i j*‡	32.90	2.30	4.30	13.00	45.40	2.10	3.4	6.4	19.4	67.7	3.1	do	761
762	Two stalks to a foot *b h i j*‡	35.30	2.30	3.70	15.50	41.40	1.80	3.5	5.7	24.1	63.9	2.8	do	762
763	Four stalks to a foot *b h i j*‡	43.10	2.10	3.20	14.90	35.30	1.40	3.7	5.6	26.4	61.8	2.5	do	763
764	Eight stalks to a foot *b h i j*‡	51.00	2.10	2.90	13.90	28.90	1.20	4.3	5.9	28.3	59.0	2.5	do	764
765	Dent	36.85	3.03	6.19	13.89	38.78	1.26	4.8	9.8	22.0	61.4	2.0	Mass. Ex. Sta. Rep., 1889, p. 33	765
766	Smedley Yellow Dent	32.29	3.86	6.16	17.40	38.39	1.90	5.7	9.1	25.7	56.7	2.8	Wis. Ex. Sta. Rep., 1889, p. 73	766

* See No. 661.
† Crop of 1888 raised on same field in rows 4 feet apart.
‡ Crop of 1889 raised on same field in rows 4 feet apart.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	CORN (MAIZE) FODDER—continued.													
	Corn (maize) fodder, cured—Continued.	%	%	%	%	%	%	%	%	%	%	%		
767	Dent, Sibley Sheep-Tooth	38.58	2.70	4.30	17.01	36.00	1.41	4.4	7.0	27.7	58.6	2.3	Wis. Ex. Sta. Rep., 1889, p. 108	767
768	Dent	27.22	4.41	4.83	24.43	36.62	2.49	6.0	6.6	33.8	50.2	3.4	Pa. Ex. Sta. Bul. 9, 1889	768
	All analyses. Maximum	60.17	5.46	6.83	24.69	47.80	2.49	7.8	11.3	39.6	67.7	3.9		
	All analyses. Minimum	22.93	1.47	2.72	7.47	20.64	0.61	2.9	5.6	14.9	43.1	1.0		
	All analyses. Average	**42.18**	**2.66**	**4.47**	**14.30**	**34.82**	**1.57**	**4.6**	**7.8**	**24.7**	**60.1**	**2.8**		
	Corn (maize) leaves, field-cured:													
769	64.31 per cent of the stover	14.75	7.38	6.38	25.08	44.13	2.19	8.8	7.5	29.1	52.0	2.6	Pa. Ex. Sta. Rep., 1887, p. 154	769
770	32 per cent of the stover	44.02	5.04	4.91	17.98	27.28	0.77	9.0	8.8	32.1	48.4	1.7	Conn. State Ex. Sta. Rep., 1887, p. 124	770
	Rhode Island White Cap (flint); planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre—													
771	One stalk in 4 feet	39.92	5.55	6.29	17.39	29.54	1.31	9.4	10.7	29.5	48.2	2.2	Conn. State Ex. Sta. Rep., 1889, p. 24	771
772	One stalk in 2 feet	36.16	5.51	6.44	19.18	31.48	1.23	8.8	10.3	30.7	48.3	1.9	do	772
773	One stalk to a foot	42.80	5.17	4.96	17.74	28.30	1.03	8.9	8.4	30.9	50.0	1.8	do	773
774	Two stalks to a foot	35.26	5.81	5.31	20.28	32.22	1.16	8.9	8.2	31.2	50.0	1.7	do	774
775	Four stalks to a foot	22.53	5.73	5.41	27.40	37.39	1.54	7.4	7.0	35.6	49.0	2.0	do	775
776	Eight stalks to a foot	28.48	4.28	4.65	22.54	38.75	1.30	6.0	6.5	31.4	54.3	1.8	do	776
	Rhode Island White Cap (flint), planted in rows 4 feet apart, 2,000 pounds ammoniated superphospate per acre—													
777	Eight stalks to a foot	32.89	5.58	5.18	20.55	34.40	1.40	8.4	7.8	30.8	50.9	2.1	do	777
	White-Edged Dent; planted in rows 4 feet apart; 1,000 pounds ammoniated superphospbate per acre—													
778	One stalk in 4 feet	33.64	6.11	8.28	18.72	31.74	1.52	9.2	12.4	28.1	48.1	2.2	do	778
779	One stalk in 2 feet	26.70	5.52	7.36	20.95	38.15	1.32	7.7	10.3	29.3	50.9	1.8	do	779
780	One stalk to a foot	18.19	6.72	7.88	24.16	41.43	1.62	8.2	9.6	29.5	50.7	2.0	do	780

781	Two stalks to a foot	26.23	6.04	6.41	21.86	38.12	1.34	8.1	8.6	29.5	52.0	1.8	do	781
782	Four stalks to a foot	24.88	4.81	5.89	22.79	40.26	1.37	6.3	7.8	30.1	54.0	1.8	do	782
783	Eight stalks to a foot	32.19	3.67	4.45	22.06	36.44	1.19	5.5	6.7	32.4	53.6	1.8	do	783
	White-Edged Dent, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre—													
784	Two stalks to a foot	27.79	5.82	6.48	21.72	36.90	1.29	8.2	9.1	30.0	50.9	1.8	do	784
785	Four stalks to a foot	23.14	5.53	6.10	23.33	40.36	1.54	7.3	7.9	30.3	52.5	2.0	do	785
	All analyses. Maximum	44.02	7.38	8.28	27.40	44.13	2.19	9.4	12.4	35.6	54.3	2.6		
	All analyses. Minimum	14.75	4.28	4.45	17.39	27.28	0.77	5.5	6.5	28.1	48.1	1.7		
	All analyses. Average	**20.97**	**5.54**	**6.02**	**21.40**	**35.70**	**1.37**	**7.9**	**8.6**	**30.5**	**51.0**	**2.0**		
	Corn (maize) husks, field-cured:													
786	22 per cent of the stover	52.00	2.07	2.71	16.79	25.82	0.61	4.3	5.7	35.0	53.7	1.3	Conn. State Ex. Sta. Rep., 1887, p. 124	786
	Rhode Island White Cap (flint), planted in rows 4 feet apart, 1,000 pounds ammoniated superphosphate per acre—													
787	One stalk in 4 feet	48.46	2.27	3.22	16.20	29.06	0.79	4.3	6.1	31.4	56.7	1.5	Conn. State Ex. Sta. Rep., 1889, p. 25	787
788	One stalk in 2 feet	58.47	2.26	2.90	13.03	22.69	0.65	5.4	7.0	31.3	54.7	1.6	do	788
789	One stalk to a foot	53.94	2.05	2.44	14.71	26.23	0.65	4.3	5.1	31.9	57.3	1.4	do	789
790	Two stalks to a foot	51.93	2.26	1.95	16.18	26.98	0.70	4.9	4.1	33.6	55.9	1.5	do	790
791	Four stalks to a foot	33.64	2.07	2.60	22.69	38.18	0.83	3.1	3.9	34.0	57.8	1.2	do	791
792	Eight stalks to a foot	26.71	1.86	3.22	23.63	43.57	1.01	2.6	4.5	32.1	59.4	1.4	do	792
793	Rhode Island White Cap (flint), planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre; 8 stalks to a foot.	45.72	1.84	2.54	17.81	31.36	0.73	3.3	4.6	33.5	57.3	1.3	do	793
	White-Edged Dent, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre—													
794	One stalk in 4 feet	63.59	1.47	2.06	11.96	20.37	0.55	3.9	5.6	32.9	56.1	1.5	do	794
795	One stalk in 2 feet	53.83	1.76	2.28	15.08	26.36	0.69	3.9	5.0	32.6	57.0	1.5	do	795
796	One stalk to a foot	50.98	1.54	2.12	15.96	28.72	0.68	3.1	4.2	32.4	58.9	1.4	do	796
797	Two stalks to a foot	48.44	1.68	2.42	16.61	30.05	0.80	3.2	4.6	32.3	58.4	1.5	do	797
798	Four stalks to a foot	48.70	1.37	2.84	15.18	31.14	0.77	2.7	5.7	29.5	60.6	1.5	do	798
799	Eight stalks to a foot	48.56	1.29	2.73	15.15	31.52	0.75	2.5	5.4	29.4	61.2	1.5	do	799
	White-Edged Dent, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre—													
800	Two stalks to a foot	52.93	1.73	2.59	14.92	27.03	0.81	3.6	5.3	31.9	57.6	1.6	do	800
801	Four stalks to a foot	76.60	0.61	1.28	6.79	14.26	0.46	2.6	5.4	28.9	61.1	2.0	do	801
	All analyses. Maximum	76.60	2.27	3.22	23.63	43.57	1.01	5.4	7.0	35.0	61.2	2.0		
	All analyses. Minimum	26.71	0.61	1.28	6.79	14.26	0.46	2.5	3.9	28.9	53.7	1.2		
	All analyses. Average	**50.90**	**1.76**	**2.49**	**15.79**	**28.34**	**0.72**	**3.5**	**5.0**	**32.2**	**57.9**	**1.4**		

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	CORN (MAIZE) FODDER—continued.													
	Corn (maize) stalks, field-cured:													
	Rhode Island White Cap, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre—	%	%	%	%	%	%	%	%	%	%	%		
802	One stalk in 4 feet	76.14	1.65	2.84	6.88	12.12	0.46	6.5	11.9	28.8	50.9	1.9	Conn. State Ex. Sta. Rep., 1889, p. 25	802
803	One stalk in 2 feet	74.93	1.22	2.38	8.35	12.73	0.39	4.9	9.5	33.3	50.7	1.6	do	803
804	One stalk to a foot	59.66	1.88	2.83	14.02	20.75	0.86	4.7	7.0	34.8	51.4	2.1	do	804
805	Two stalks to a foot	67.28	1.67	1.76	11.89	16.97	0.43	5.1	5.4	36.4	51.8	1.3	do	805
806	Four stalks to a foot	78.53	0.86	1.15	7.96	11.18	0.32	4.0	5.4	37.0	52.1	1.5	do	806
807	Eight stalks to a foot	70.32	0.81	1.83	9.47	17.00	0.57	2.7	6.2	31.9	57.3	1.9	do	807
808	Rhode Island White Cap, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre, 8 stalks to a foot.	51.33	1.95	2.98	16.80	25.98	0.98	4.0	6.1	34.5	53.4	2.0	do	808
	White-Edged Dent, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre—													
809	One stalk in 4 feet	76.25	1.22	1.90	8.51	11.70	0.42	5.1	8.0	35.8	49.3	1.8	do	809
810	One stalk in 2 feet	73.98	0.99	1.68	9.64	13.27	0.44	3.8	6.5	37.1	50.9	1.7	do	810
811	One stalk to a foot	68.47	1.05	1.53	11.97	16.48	0.60	3.3	4.8	38.1	52.2	1.6	do	811
812	Two stalks to a foot	61.06	1.07	1.62	14.89	20.84	0.52	2.7	4.2	38.2	53.5	1.4	do	812
813	Four stalks to a foot	66.47	0.69	1.38	10.86	20.14	0.46	2.1	4.1	32.4	60.0	1.4	do	813
814	Eight stalks to a foot	66.70	0.63	1.37	10.25	20.63	0.42	1.9	4.1	30.8	61.9	1.3	do	814
	White-Edged Dent, planted in rows 4 feet apart; 2,000 pounds ammoniated superphosphate per acre—													
815	Two stalks to a foot	67.69	0.94	1.49	12.02	17.42	0.44	2.9	4.6	37.2	54.0	1.3	do	815
816	Four stalks to a foot	67.47	0.84	1.53	10.84	18.73	0.59	2.6	4.7	33.3	57.6	1.8	do	816
817	Variety unknown	22.63	5.35	6.47	28.43	35.87	1.25	6.9	8.4	36.7	46.3	1.7	N. Y. State Ex. Sta. Rep., 1888, p. 238	817
818	Tops of stalks, 4.60 per cent of the stover *a*	14.35	5.12	3.62	30.54	45.08	1.16	6.0	4.1	35.8	52.8	1.3	Pa. Ex. Sta. Rep., 1887, p. 154	818
819	Butts of stalks, 10.24 per cent of the stover. *a*	16.29	4.96	3.49	30.71	42.36	1.80	6.0	4.2	36.7	50.9	2.2	do	819
820	Middle portion of stalks, 17.67 per cent of the stover. *a* *	15.72	4.39	2.71	30.50	44.87	1.07	5.2	3.2	36.2	53.1	1.3	do	820
821	Upper half of stalks, 12 per cent of the stover.	45.67	2.46	1.88	22.57	26.76	0.66	4.5	3.5	41.6	49.3	1.2	Conn. State Ex. Sta. Rep., 1887, p. 124	821

822	Lower half of stalks, 34 per cent of the stover.		65.94	1.22	1.10	15.03	16.23	0.48	3.6	3.2	44.2	47.6	1.4	do	822
	All analyses, excluding Nos. 817-822.	Maximum	78.53	1.95	2.98	16.80	25.98	0.98	6.5	11.9	38.2	61.9	2.1		
		Minimum	51.33	0.63	1.15	6.88	11.18	0.32	1.9	4.1	28.8	49.3	1.3		
		Average	**68.42**	**1.16**	**1.88**	**10.96**	**17.06**	**0.52**	**3.6**	**5.0**	**34.8**	**54.1**	**1.6**		
	Corn (maize) stover, field-cured:														
823	Norfolk White (dent), raised on land long tilled.		27.59	4.76	4.97	24.76	36.37	1.55	6.5	6.8	34.2	60.3	2.2	Am. Jour. Sci. and Arts, 1877, p. 203	823
824	Norfolk White (dent), raised on new land		26.92	3.62	3.79	25.18	39.42	1.07	4.9	5.2	34.5	54.0	1.4	do	824
825	Ohio Dent		36.49	2.87	4.63	19.08	35.78	1.16	4.5	7.3	30.0	66.4	1.8	Conn. State Ex. Sta. Rep., 1878, p. 60	825
826	White-Edged Dent		23.13	4.34	7.19	27.24	36.45	1.65	5.7	9.4	35.4	47.4	2.1	Conn. State Ex. Sta. Rep., 1881, p. 88	826
827	Topover corn		25.00	4.59	4.85	27.08	36.61	1.87	6.1	6.5	36.1	48.8	2.5	Mass. State Ex. Sta. Rep., 1885, p. 81	827
828	Variety unknown		15.44	6.58	8.30	23.40	44.63	1.65	7.8	9.8	27.7	52.7	2.0	Ky. Ex. Sta. Bul. 2, 1886	828
829	Do		16.23	6.47	4.85	24.91	46.18	1.36	7.7	5.8	29.7	55.2	1.6	Ky. Ex. Sta. Bul. 6, 1886	829
830	Do		18.00	7.00	4.30	25.44	43.94	1.32	8.5	5.2	31.0	53.7	1.6	do	830
831	Western Dent		16.67	3.47	5.54	29.53	43.37	1.42	4.2	6.6	35.4	52.1	1.7	Mass. State Ex. Sta. Bul. 26, 1887	831
832	Variety unknown		15.40	3.57	7.75	17.71	53.34	2.23	4.2	9.2	20.9	63.1	2.6	Mass. State Ex. Sta. Rep., 1887, p. 20	832
833	White-Edged Dent *chij*		48.65	3.50	3.89	16.69	26.39	0.88	6.8	7.6	32.5	51.4	1.7	Conn. State Ex. Sta. Rep., 1887, p. 119	833
834	Variety unknown *a*		32.65	1.74	3.01	27.34	34.08	1.18	4.9	4.5	40.6	45.4	1.6	Ill. Ex. Sta. Bul. 2, 1888	834
835	Dent, 108 bushels of ears to the acre *a*		15.53	6.36	5.76	25.87	44.49	1.99	7.6	6.7	30.6	52.8	2.4	Pa. Ex. Sta. Bul. 3, 1888	835
836	Variety unknown		19.07	3.41	7.42	16.94	51.03	2.13	4.2	9.2	20.9	63.1	2.6	Mass. Ex. Sta. Rep., 1888, p. 37	836
	Flint variety—														
837	No fertilizer *hij*		44.84	3.03	4.36	20.02	26.76	0.99	5.5	7.9	36.3	48.5	1.8	Storrs School Ex. Sta. Rep., 1889, p. 149	837
838	Nitrate of soda *hij*		49.76	2.21	4.82	14.92	27.44	0.85	4.4	9.6	29.7	54.6	1.7	do	838
839	Dissolved boneblack *hij*		47.44	2.73	4.94	16.14	27.86	0.89	5.2	9.4	30.7	53.0	1.7	do	839
840	Muriate of potash		48.89	2.81	2.86	15.33	29.14	0.97	5.5	6.6	30.0	57.0	1.9	do	840
841	Nitrate of soda, dissolved boneblack *hij*		52.23	2.48	4.44	14.48	25.56	0.81	5.2	9.3	30.3	53.5	1.7	do	841
842	Nitrate of soda, muriate of potash *hij*		49.77	3.01	2.76	17.23	26.38	0.85	6.0	5.5	34.3	62.5	1.7	do	842
843	Dissolved boneblack, muriate of potash (mixed minerals) *hij*		54.57	2.43	2.09	14.13	25.78	1.00	5.4	4.6	31.1	66.7	2.2	do	843
844	Mixed minerals as in No. 843; nitrate of of soda ⅓ ration. *hij*		52.96	2.68	2.26	16.09	25.21	0.80	5.7	4.8	34.2	53.6	1.7	do	844
845	Mixed minerals as in No. 843; nitrate of soda ⅔ ration. *hij*		46.74	2.88	2.77	18.75	27.96	0.90	5.4	5.2	35.2	52.5	1.7	do	845
846	Mixed minerals as in No. 843; nitrate of soda full ration. *hij*		54.41	2.37	2.55	15.55	24.30	0.82	5.2	5.6	34.1	53.3	1.8	do	846
847	Mixed minerals as in No. 843; sulphate ammonia ⅓ ration. *hij*		55.18	2.42	2.29	14.39	24.87	0.85	5.4	5.1	32.1	55.5	1.9	do	847
848	Mixed minerals as in No. 843; sulphate of ammonia ⅔ ration. *hij*		55.61	2.57	1.82	15.45	23.75	0.80	5.8	4.1	34.8	53.5	1.8	do	848
849	Mixed minerals as in No. 843; sulphate of ammonia full ration. *hij*		50.37	2.78	2.43	18.11	25.66	0.65	5.6	4.9	36.5	51.7	1.3	do	849
850	Mixed minerals as in No. 843; dried blood ⅓ ration. *hij*		57.44	2.38	1.96	14.17	23.28	0.77	5.6	4.6	33.3	54.7	1.8	do	850
851	Mixed minerals as in No. 843; dried blood ⅔ ration. *hij*		55.78	2.43	1.99	15.34	23.62	0.84	5.5	4.5	34.7	53.4	1.9	do	851
852	Mixed minerals as in No. 843; dried blood full ration. *hij*		54.20	2.61	2.02	15.80	24.59	0.78	5.7	4.4	34.5	53.7	1.7	do	852

* Adds 99.26 (fresh or air-dry material).

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	CORN (MAIZE) FODDER—continued.													
	Corn (maize) stover, field cured—Continued.													
	Flint variety—Continued.	%	%	%	%	%	%	%	%	%	%	%		
853	No fertilizer *h i j*	44.01	3.19	3.58	18.98	29.06	1.18	5.7	6.4	33.9	51.9	2.1	Storrs School Ex. Sta. Rep., 1889, p. 153	853
854	Dissolved boneblack *h i j*	38.20	3.34	2.90	21.51	32.81	1.24	5.4	4.7	34.8	53.1	2.0	do	854
855	Muriate of potash *h i j*	48.03	2.86	2.29	16.94	28.94	0.94	5.5	4.4	32.6	55.7	1.8	do	855
856	Dissolved boneblack, muriate of potash (mixed minerals). *h i j*	52.83	3.02	2.41	15.00	25.94	0.80	6.4	5.1	31.8	55.0	1.7	do	856
857	Mixed minerals as in No. 856; nitrate of soda ⅓ ration. *h i j*	39.50	3.27	2.96	20.51	32.67	1.09	5.4	4.9	33.9	54.0	1.8	do	857
858	Mixed minerals as in No. 856; nitrate of soda ⅔ ration. *h i j*	40.09	3.47	3.18	20.49	31.63	1.14	5.8	5.3	34.2	52.8	1.9	do	858
859	Mixed minerals as in No. 856; nitrate of soda full ration. *h i j*	45.02	3.08	3.08	19.24	28.43	1.15	5.6	5.6	35.0	51.7	2.1	do	859
860	Mixed minerals as in No. 856; sulphate of ammonia ⅓ ration. *h i j*	47.27	3.32	2.85	18.03	27.58	0.95	6.3	5.4	34.2	52.3	1.8	do	860
861	Mixed minerals as in No. 856; sulphate of ammonia ⅔ ration. *h i j*	47.91	2.92	2.66	19.22	26.56	0.73	5.6	5.1	36.9	51.0	1.4	do	861
862	Mixed minerals as in No. 856; sulphate of ammonia full ration. *h i j*	49.75	2.86	3.22	17.49	25.68	1.00	5.7	6.4	34.8	51.1	2.0	do	862
863	Mixed minerals as in No. 856; dried blood ⅓ ration. *h i j*	45.08	3.57	2.58	18.73	29.05	0.99	6.5	4.7	34.1	52.9	1.8	do	863
864	Mixed minerals ae in No. 856; dried blood ⅔ ration. *h i j*	46.69	3.20	1.97	18.61	28.46	1.07	6.0	3.7	34.9	53.4	2.0	do	864
865	Mixed minerals as in No. 856; dried blood full ration. *h i j*	40.99	3.48	2.71	20.89	30.69	1.24	5.9	4.6	35.4	52.0	2.1	do	865
866	No fertilizer *h i j*	38.71	3.43	4.47	20.04	32.06	1.29	5.6	7.3	32.7	52.3	2.1	Storrs School Ex. Sta. Rep., 1889, p. 157	866
867	Nitrate of soda *h i j*	39.63	3.38	5.19	19.92	30.73	1.15	5.6	8.6	33.0	50.9	1.9	do	867
868	Dissolved boneblack *h i j*	38.64	3.37	4.72	20.25	31.79	1.23	5.5	7.7	33.0	51.8	2.0	do	868
869	Muriate of potash *h i j*	45.86	3.19	3.84	17.98	28.05	1.08	5.9	7.1	33.2	51.8	2.0	do	869
870	Nitrate of soda; dissolved boneblack *h i j*	39.06	3.47	4.81	20.11	31.27	1.28	5.7	7.9	33.0	51.3	2.1	do	870
871	Nitrate of soda, muriate of potash *h i j*	39.23	3.34	5.04	19.93	31.31	1.15	5.5	8.3	32.8	51.5	1.9	do	871
872	Dissolved boneblack; muriate of potash. *h i j*	46.43	3.48	3.54	17.30	27.91	1.34	6.5	6.6	32.3	52.1	2.5	do	872
873	Nitrate of soda, dissolved boneblack, muriate of potash. *h i j*	42.77	3.38	4.98	19.29	28.44	1.14	5.9	8.7	33.7	49.7	2.0	do	873
874	Plaster *h i j*	33.51	3.66	3.79	22.54	35.24	1.26	5.5	5.7	33.9	53.0	1.9	do	874

	White-Edged Dent, planted in rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre—													
875	One stalk in 4 feet	40.54	3.91	3.91	20.31	30.54	0.79	6.5	6.6	34.2	51.4	1.3	Conn. State Ex. Sta. Rep., 1889, p. 222	875
876	One stalk in 2 feet	40.89	3.82	2.92	20.73	30.92	0.72	6.4	4.9	35.1	52.4	1.2	do	876
877	One stalk to a foot	31.53	4.22	3.56	23.66	36.10	0.93	6.1	5.1	34.5	52.9	1.4	do	877
878	Two stalks to a foot	37.22	3.23	3.01	22.02	33.42	1.10	5.1	4.8	35.1	53.2	1.8	do	878
879	Four stalks to a foot	45.01	2.56	2.80	18.66	29.93	1.04	4.7	5.1	33.9	54.2	2.1	do	879
880	Eight stalks to a foot	53.63	2.46	2.52	15.92	24.53	0.94	5.3	5.4	34.3	52.9	2.1	do	880
881	Variety unknown	50.13	1.85	3.99	17.20	25.93	0.90	3.7	8.0	34.5	52.0	1.8	Mass. State Ex. Sta. Rep., 1889, p. 33	881
882	Do	15.60	6.75	6.67	32.24	37.74	1.00	8.0	7.9	38.2	44.7	1.2	Mass. State Ex. Sta. Rep., 1889, p. 143	882
883	Do	17.22	3.72	5.04	23.50	49.45	1.15	4.5	6.1	28.4	60.1	1.4	do	883
	All analyses. Maximum	57.44	7.00	8.30	32.24	53.34	2.23	8.0	9.8	40.6	63.1	2.6		
	All analyses. Minimum	15.40	1.74	1.82	14.13	23.28	0.65	3.7	3.7	20.9	44.7	1.2		
	All analyses. Average	**40.13**	**3.43**	**3.82**	**19.75**	**31.75**	**1.12**	**5.7**	**6.4**	**33.0**	**53.2**	**1.7**		
	Corn (maize) stover, cured:													
884	Variety unknown	12.25	5.39	4.06	30.94	45.86	1.50	6.1	4.6	35.3	52.3	1.7	N. J. Ex. Sta. Rep., 1882, p. 70	884
885	Variety unknown, frost-bitten	8.73	2.85	6.00	31.29	49.96	1.17	3.1	6.6	34.3	54.7	1.3	Agr. of Mass., 1883, p. 319	885
886	Variety unknown *b*	9.72	4.82	4.00	33.60	47.04	0.82	5.3	4.4	37.2	52.1	1.0	N. J. Ex. Sta. Rep., 1884, p. 107	886
887	Do. *b*	12.99	5.58	4.19	31.01	45.30	0.93	6.4	4.8	35.6	52.1	1.1	do	887
888	Do. *b*	11.60	4.78	4.19	31.40	46.74	1.29	5.4	4.7	35.5	52.9	1.5	N. J. Ex. Sta. Rep., 1886, p. 160	888
889	Dent *b*	10.95	4.50	7.13	28.92	48.46	0.94	5.0	7.9	32.1	53.9	1.1	do	889
890	Yellow flint *b*	8.45	5.50	8.45	26.62	49.93	1.06	6.0	9.3	29.1	54.4	1.2	do	890
891	Variety unknown	7.86	4.40	5.00	28.73	52.91	1.10	4.8	5.4	31.2	57.4	1.2	do	891
892	Do	8.22	5.49	5.81	28.58	51.03	0.87	6.0	6.3	31.1	55.6	1.0	do	892
893	Do	8.38	5.36	5.38	28.80	51.18	0.90	5.9	5.9	31.4	55.8	1.0	do	893
894	Do	7.57	4.66	3.44	30.21	52.86	1.26	5.1	3.7	32.8	57.0	1.4	do	894
895	Yellow dent *b*	8.14	7.07	3.63	30.31	49.45	1.40	7.7	3.9	33.1	53.8	1.5	do	895
896	Variety unknown	8.30	6.40	6.74	30.14	46.44	1.97	7.0	7.3	32.8	50.8	2.1	Ind. Ex. Sta. Bul. 24, 1889	896
	HAY OF CEREAL GRASSES.													
897	Rye, cut May 25; in full bloom	8.55	5.85	9.75	30.15	43.35	2.35	6.4	10.7	33.0	47.4	2.5	Mass. State Ex. Sta. Rep., 1883, p. 79	897
	Oats:													
898	Cut Aug. 26; plant matured	8.70	5.58	5.52	33.15	44.67	2.38	6.1	6.1	36.3	48.9	2.6	Mass. State Ex. Sta. Rep., 1883, p. 80	898
899	Cut Aug. 1; in full bloom	6.43	6.00	6.16	31.87	46.81	2.73	6.4	6.6	34.1	50.0	2.9	Mass. State Ex. Sta. Rep., 1883, p. 81	899
900	Cut July 9; seed in milk	9.55	5.50	9.85	31.04	41.63	2.43	6.1	10.9	34.3	46.0	2.7	Mass. State Ex. Sta. Rep., 1885, p. 64	900
901	Time of cutting unknown	8.70	7.45	7.75	25.10	47.95	3.05	8.1	8.4	27.5	52.6	3.4	Ohio Ex. Sta. Rep., 1885, p. 234	901
902	Cut when nearly ripe	13.78	6.31	7.99	33.62	36.23	2.07	7.3	9.3	39.0	42.0	2.4	Conn. State Ex. Sta. Rep., 1886, p. 113	902
903	Time of cutting unknown	6.15	6.30	8.56	21.05	53.39	4.55	6.7	9.1	22.4	56.9	4.9	Vt. Ex. Sta. Rep., 1887, p. 123	903
904	Barley, cut July 9; seed in milk	10.25	4.44	9.21	26.14	47.49	2.47	5.0	10.2	29.1	52.9	2.8	Mass. State Ex. Sta. Rep., 1885, p. 65	904
	HAY OF GRASSES.													
	Couch, quitch, or wheat grass (*Agropyrum repens*):													
905	Cut 1879; grown in New Hampshire *a k*	14.30	7.99	9.84	16.63	48.22	3.02	9.3	11.5	19.4	56.3	3.5	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128.	905
906	Cut 1879; grown in Pennsylvania *a k*	14.30	5.34	7.22	20.64	49.50	3.00	6.2	8.4	24.2	57.7	3.5	do	906
907	Cut 1880; grown in Maine *a k*	14.30	6.25	10.83	21.68	43.66	3.28	7.3	12.7	25.3	50.9	3.8	do	907
908	Cut July 13; in bloom	6.25	6.37	8.75	34.50	41.11	2.94	6.8	9.3	36.9	43.9	3.1	Me. Ex. Sta. Rep., 1885–'86, p. 51	908
909	In bloom (digestion coefficients given)	10.85	4.83	8.50	33.94	38.52	3.36	5.4	9.5	38.1	43.2	3.8	Me. Ex. Sta. Rep., 1888, p. 86	909

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF GRASSES—continued.													
	Fiorin (*Agrostis alba*), grown on a salt marsh:	%	%	%	%	%	%	%	%	%	%	%		
910	Cut June 22, before bloom	7.68	6.73	9.38	26.47	47.48	2.26	7.28	10.18	28.68	51.41	2.45	Conn. State Ex. Sta. Rep., 1889, p. 245	910
911	Cut August 12, seed gone (same locality as No. 910).	6.83	4.92	5.19	27.53	53.92	1.61	5.28	5.57	29.55	57.87	1.73	do	911
912	Cut June 28, in bloom	9.08	8.64	8.69	24.48	46.65	2.46	9.52	9.57	26.94	51.28	2.69	do	912
	Redtop, herd's grass (of Pa.), bent grass (*Agrostis vulgaris*):													
913	Cut July 1, grown in Pennsylvania *a k*	14.30	5.90	8.48	21.71	46.77	2.84	6.9	9.9	25.3	54.6	3.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	913
914	Cut July 1, grown in Delaware *a k*	14.30	5.60	9.64	18.75	48.68	3.03	6.5	11.3	21.7	57.0	3.5	do	914
915	Cut when seeds were ripening; taken from stack.	9.84	6.99	7.25	27.45	46.52	1.95	7.8	8.0	30.5	51.6	2.1	Ky. Ex. Sta. Bul. 5, 1886, p. 22	915
916	Cut July 5, in bloom; fertilized	6.81	5.30	7.76	31.79	46.89	1.45	5.7	8.3	34.1	50.3	1.6	Mass. State Ex. Sta. Rep., 1887, p. 126	916
917	Cut July 5, in bloom; unfertilized	7.75	4.77	7.75	30.40	47.82	1.51	5.2	8.4	32.9	51.9	1.6	do	917
918	Cut July 22, in seed; fertilized	8.24	4.44	5.88	30.73	49.33	1.38	4.8	6.4	33.5	53.8	1.5	do	918
919	Cut July 22, in seed; unfertilized	8.02	3.83	7.62	28.63	50.35	1.55	4.2	8.3	31.1	54.7	1.7	do	919
920	In full bloom (digestion coefficients given)	11.60	4.47	8.56	27.38	44.78	3.21	5.1	9.7	31.0	50.6	3.6	Me. Ex. Sta. Rep., 1888, p. 86	920
921	Time of cutting unknown	10.00	6.50	10.43	24.00	46.76	2.31	7.2	11.6	26.7	51.9	2.6	Ark. Ex. Sta. Rep., 1888, p. 132	921
	All analyses, excluding Nos. 913 and 914. Maximum	11.60	6.99	10.43	31.79	50.35	3.21	7.8	11.6	34.1	54.7	3.6		
	Minimum	6.81	3.83	5.88	24.00	44.78	1.38	4.2	6.4	21.7	50.3	1.5		
	Average	**8.89**	**5.19**	**7.89**	**28.63**	**47.49**	**1.91**	**5.7**	**8.7**	**31.4**	**52.1**	**2.1**		
	Average composition, cut in bloom, 3 analyses.*	**8.72**	**4.85**	**8.02**	**29.86**	**46.49**	**2.06**	**5.4**	**8.7**	**32.8**	**50.8**	**2.3**		
	Blue stem, finger-spiked broom grass (*Andropogon provincialis*):													
922	Cut 1879; grown in Minnesota *a k*	14.30	4.36	6.90	21.98	49.87	2.59	5.1	8.1	25.6	58.2	3.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	922
923	Cut 1879; grown in Nebraska *a k*	14.30	6.74	4.56	22.50	50.10	1.80	7.8	5.3	26.3	58.5	2.1	do	923
924	Cut 1879; grown in Indian Territory *a k*	14.30	3.50	3.39	26.72	49.36	2.73	4.1	3.9	31.2	57.6	3.2	do	924
925	Cut Sept. 2, 1880; grown in Pennsylvania *a k*	14.30	11.60	4.28	23.17	44.53	2.12	13.5	5.0	27.0	52.0	2.5	do	925

	Broom grass (*Andropogon scoparius*):													
926	Cut 1879; before bloom; grown in Alabama *a k*	14.30	6.09	5.53	24.91	47.58	1.59	7.1	6.4	29.1	55.5	1.9	do	926
927	Cut 1878; grown in Alabama *a k*	14.30	5.00	4.84	21.12	53.39	1.35	5.8	5.7	24.6	62.3	1.6	do	927
928	Cut 1879; grown in Indian Territory *a k*	14.30	3.82	3.55	25.57	50.03	2.73	4.5	4.1	29.8	58.4	3.2	do	928
	Sweet vernal grass (*Anthoxanthum odoratum*):													
929	Cut 1879, grown in New Hampshire *a k*	14.30	7.22	7.34	22.10	46.12	2.92	8.4	8.6	25.8	53.8	3.4	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	929
930	Cut May 11 to 24, 1880; grown in Pennsylvania. *a k*	14.30	5.00	9.85	21.85	46.46	2.54	5.8	11.6	25.5	54.2	2.9	do	930
	Tall oat grass, evergreen grass (*Arrhenatherum avenaceum*):													
931	Cut May 12, 1880; grown in North Carolina; late bloom. *a k*	14.30	7.23	10.88	24.36	42.82	2.41	8.4	12.7	26.1	50.0	2.8	U. S. Dept. Agr., Chem. Comp. Am. Grasess, 1884, p. 127.	931
932	Time of cutting unknown	10.68	5.00	8.69	27.85	44.48	3.30	5.6	9.8	31.2	49.7	3.7	Ark. Ex. Sta. Rep., 1888, p. 131	932
	Bermuda grass (*Cynodon dactylon*):													
933	Cut 1878; grown in Alabama *a k*	14.30	7.81	11.50	19.96	45.09	1.34	9.1	13.4	23.3	52.6	1.6	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	933
934	Cut 1878; grown in Mississippi *a k*	14.30	8.49	9.16	20.16	46.06	1.83	9.9	10.7	23.5	53.8	2.1	do	934
935	Time of cutting unknown	10.36	8.60	8.75	21.64	48.46	2.19	9.6	9.8	24.1	54.1	2.4	S. C. Ex. Sta. Rep., 1888, p. 123	935
936	Do	7.14	3.48	10.75	25.02	50.71	2.90	3.8	11.6	26.9	54.6	3.1	Ga. Ex. Sta. Bnl. 7, 1890	936
	Orchard grass (*Dactylis glomerata*):													
937	Grown in New Hampshire *a k*	14.30	7.23	7.21	21.35	46.92	2.99	8.4	8.4	24.9	54.8	3.5	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	937
938	Cut 1880; grown in Pennsylvania *a k*	14.30	5.42	7.34	23.58	47.08	2.28	6.3	8.6	27.5	54.9	2.7	do	938
939	Cut 1880; grown in North Carolina *a k*	14.30	6.36	8.49	19.78	48.02	3.05	7.4	9.9	23.1	56.0	3.6	do	939
940	Do. *a k*	14.30	7.63	8.82	21.40	44.70	3.15	8.9	10.2	25.0	52.2	3.7	do	940
941	Grown in Maine *a k*	14.30	6.87	7.49	22.33	46.96	2.05	8.0	8.7	26.1	54.8	2.4	do	941
942	Time of cutting unknown	6.53	6.11	6.63	29.74	48.57	2.45	6.6	7.1	31.8	51.9	2.6	N. J. Ex. Sta. Rep., 1886 p. 160	942
943	Do	7.32	5.48	6.88	30.70	47.95	1.67	5.9	7.4	33.2	51.7	1.8	do	943
944	Cut about June 1, in bloom; grown on rich upland; affected by drouth; taken from stack.	11.80	5.90	8.17	38.33	33.54	2.26	6.7	9.3	43.5	38.0	2.5	Ky. Ex. Sta. Bul. 4, p. 22	944
945	Cut June 7, in bloom; fertilized	9.09	7.18	8.13	31.02	42.39	2.19	7.9	8.9	34.1	46.7	2.4	Mass. State Ex. Sta. Rep., 1887, p. 125	945
946	Cut June 7, in bloom; unfertilized	9.16	7.88	10.21	31.02	39.55	2.18	8.7	11.2	34.1	43.6	2.4	do	946
947	Cut June 30, in seed; fertilized	8.38	5.65	6.94	32.51	43.26	3.26	6.2	7.6	35.5	47.2	3.5	do	947
948	Cut June 30, in seed; unfertilized	8.72	4.99	7.44	32.67	43.21	2.97	5.5	8.1	35.9	47.2	3.3	do	948
949	Cut 7 to 10 days past bloom (digestion coefficients given). *a*	10.95	6.25	7.50	33.02	39.25	3.03	7.0	8.4	37.1	44.1	3.4	Me. Ex. Sta. Rep., 1888, p. 86	949
950	Time of cutting unknown	10.47	5.23	10.40	28.94	42.46	2.50	5.8	11.6	32.3	47.5	2.8	Ark. Ex. Sta. Rep., 1888, p. 131	950
951	Do	13.64	5.63	8.31	36.18	32.92	3.32	6.5	9.6	41.9	38.2	3.8	N. Y. State Ex. Sta. Rep., 1888, p. 237	951
952	Do	12.50	5.37	8.42	32.08	38.43	3.20	6.2	9.6	36.6	43.9	3.7	do	952
953	Cut June 14, in full bloom *a h i j*	26.20	7.27	7.42	24.25	31.41	3.45	9.9	10.0	32.8	42.6	4.7	Ill. Ex. Sta. Bul. 5, 1889	953
954	Do. *a h i j*	28.21	6.75	7.85	24.04	29.68	3.47	9.5	10.9	33.5	41.3	4.8	do	954
955	Do. *a h i j*	24.81	6.66	7.90	27.49	29.75	3.39	8.8	10.5	36.6	39.6	4.5	do	955
956	Cut June 21 and 22; seed in milk; heads green, tinged with purple. *a h i j*	35.49	6.86	6.20	22.87	26.23	2.35	10.6	9.6	35.5	40.6	3.7	do	956

*Nos. 916, 917, 920.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

	In fresh or air-dry material.						Calculated to water-free substance.					Refereuces to publications.	
	Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
HAY AND OTHER DRIED COARSE FODDERS—Continued.													
HAY OF GRASSES—continued.													
Orchard grass (*Dactylis glomerata*)—Cont'd.	%	%	%	%	%	%	%	%	%	%	%		
Time of cutting nuknown *a h i j*	33.69	7.11	5.80	21.07	29.18	3.15	10.7	8.7	31.8	44.0	4.8	Ill. Ex. Sta. Bul. 5, 1889	957
De. *a h i j*	31.62	6.49	6.58	17.95	34.60	2.76	9.5	9.6	26.2	50.6	4.1	do	958
Analyses Nos. 942-952. Maximum	13.64	7.88	10.40	38.33	48.57	3.32	8.7	11.6	43.5	51.9	3.8		
Analyses Nos. 942-952. Minimum	6.53	4.99	6.63	28.94	32.92	1.67	5.5	7.1	31.8	38.9	1.8		
Analyses Nos. 942-952. Average	**9.87**	**5.97**	**8.09**	**32.39**	**41.05**	**2.63**	**6.7**	**9.0**	**36.0**	**45.4**	**2.9**		
Average composition, analyses Nos. 953-958.	**30.00**	**6.85**	**0.96**	**22.96**	**30.14**	**3.09**	**9.8**	**9.9**	**32.9**	**43.0**	**4.4**		
Spiked wild oat grass (*Danthonia spicata*):													
Cut 1879; grown in New Hampshire *a k*	14.30	3.75	4.96	24.95	48.78	3.26	4.4	5.8	29.1	56.9	3.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	959
Cut in bloom *a*	8.33	3.49	6.87	31.26	47.38	2.67	3.8	7.5	34.1	51.7	2.9	Me. Ex. Sta. Rep., 1888, p. 86	960
Blue joint finger grass (*Deyeuxia canadensis*):													
Cut July 13; very rank in a rich swale	6.87	5.49	11.19	37.18	35.82	3.45	5.9	12.0	39.9	38.5	3.7	Me. Ex. Sta. Rep., 1885-'86, p. 51	961
Cut first week in August; contained some rushes, sedges, etc.	5.90	5.85	6.86	27.21	51.79	2.39	6.2	7.3	28.9	55.1	2.5	Mass. State Ex. Sta. Rep., 1885, p. 97	962
Time of cutting unknown	8.62	5.46	9.19	33.10	40.81	2.82	6.0	10.1	36.2	44.6	3.1	Me. Ex. Sta. Bul. 26. 1888	963
Crab grass, finger grass (*Panicum sanguinale*):													
Cut 1878, grown in Alabama *a k*	14.30	10.81	8.38	27.50	36.59	2.42	12.6	9.8	32.1	42.7	2.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	964
Cut Aug. 11, 1880; grown in Pennsylvania *a k*	14.30	9.81	10.14	19.63	43.33	2.79	11.5	11.8	22.9	50.5	3.3	do	965
Yard grass, crowfoot, crab grass, wire grass (*Eleusine indica*):													
Grown in Texas *a k*	14.30	16.49	11.65	26.58	29.15	1.83	19.2	13.7	31.0	34.0	2.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	966
Cut in 1878; grown in Georgia *a k*	14.30	7.06	10.39	19.27	47.20	1.78	8.2	12.1	22.5	55.1	2.1	do	967
Cut in 1878; grown in Alabama *a k*	14.30	8.32	9.48	18.19	47.54	2.17	9.7	11.1	21.2	55.5	2.5	do	968
Meadow fescue (*Festuca pratensis*):													
Grown in New Hampshire *a k*	14.30	7.83	9.21	20.78	45.07	2.81	9.1	10.7	24.3	52.6	3.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128.	969
Cut June 1; grown in District of Columbia. *a k*	14.30	6.14	6.74	23.68	43.31	2.83	7.1	11.4	27.6	50.6	3.3	do	970
Cut June 2; grown in Pennsylvania *a k*	14.30	6.91	11.80	19.29	44.22	3.48	8.1	13.7	22.5	51.6	4.1	do	971
Cut June 28, in seed; fertilized	7.40	6.65	6.50	31.90	45.54	2.01	7.2	7.0	34.5	49.2	2.1	Mass. State Ex. Sta. Rep., 1887, p. 126	972

974	Cut June 14; one half in bloom, one half in milk. *a*	29.50	6.59	5.54	27.02	28.50	2.85	9.3	7.9	38.3	40.5	4.0	Ill. Ex. Sta. Bul. 5, 1889	974
975	Do	28.18	5.49	5.97	23.54	33.70	3.12	7.6	8.3	32.8	46.9	4.4	do	975
976	Cut June 21; seeds milk to dough, spikelets yellow. *a h i j*	31.73	6.79	4.48	22.71	31.52	2.77	9.9	6.6	33.2	46.2	4.1	do	976
977	Time of cutting unknown *a h i j*	32.53	7.69	5.91	21.30	29.64	2.93	11.4	8.8	31.5	44.0	4.3	do	977
	Nerved meadow grass, nerved manna grass (*Glyceria nervata*):													
978	Cut 1879, grown in Vermont *a k*	14.30	5.30	8.06	24.17	45.43	2.74	6.2	9.4	28.2	53.0	3.2	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	978
979	Cut 1979, grown in New Hampshire *a k*	14.30	5.83	7.12	18.83	51.43	2.49	6.8	8.3	22.0	60.0	2.9	do	979
980	Cut June 2, 1880; grown in Pennsylvania *a k*	14.30	6.79	12.70	18.32	45.43	2.46	7.9	14.8	21.4	53.0	2.9	do	980
	Italian rye grass (*Lolium italicum*):													
981	In bloom; fertilized *c*	9.30	6.74	8.84	28.36	44.91	1.85	7.4	9.8	31.3	49.5	2.0	Mass. State Ex. Sta. Rep., 1889, p. 162	981
982	In bloom; unfertilized *c*	8.96	6.83	6.49	29.85	46.60	1.27	7.6	7.1	32.8	51.2	1.4	do	982
983	In seed: fertilized *c*	8.22	7.87	8.75	33.87	39.55	1.74	8.6	9.5	36.9	43.1	1.9	do	983
984	In seed; unfertilized *c*	7.38	6.07	5.74	29.99	48.90	1.92	6.6	6.2	32.4	52.8	2.0	do	984
	Drop seed, nimble Will, wire grass (*Muhlenbergia diffusa*):													
985	Cut in 1878; grown in Texas *a k*	14.30	7.95	8.57	20.19	47.44	1.55	9.3	10.0	23.5	55.4	1.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	985
986	Cut Aug. 25, 1880; grown in Pennsylvania *a k*	14.30	14.06	9.32	8.80	40.58	2.94	16.4	10.9	21.9	47.4	3.4	do	986
	Two-edged panic (*Panicum anceps*):													
987	Grown in Alabama *a k*	14.30	7.76	4.95	23.89	47.56	1.57	9.1	5.8	27.8	55.5	1.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	987
988	Cut July 31, 1880; grown in Pennsylvania *a k*	14.30	4.87	7.74	17.89	53.64	1.56	5.7	9.0	20.9	62.6	1.8	do	988
	Barnyard grass (*Panicum crus-galli*):													
989	Grown in Alabama *a k*	14.30	5.98	6.66	24.78	46.44	1.84	7.0	7.8	28.9	54.2	2.1	do	989
990	Grown in Texas *a k*	14.30	13.77	3.42	26.68	40.08	1.75	16.1	4.0	31.1	46.8	2.0	do	990
991	Cut Aug. 25, 1880; grown in Pennsylvania *a k*	14.30	10.13	10.80	21.69	40.95	2.13	11.8	12.6	25.3	47.8	2.5	do	991
	Tall panic, switch grass (*Panicum virgatum*):													
992	Cut in 1879; grown in Indian Territory, low growth *a k*	14.30	4.70	4.39	24.95	48.81	2.85	5.5	5.1	29.1	57.0	3.3	do	992
993	Cut in 1879; grown in Indian Territory, tall growth *a k*	14.30	3.92	2.40	27.64	49.19	2.55	4.6	2.8	32.2	57.4	3.0	do	993
994	Cut in 1878; grown in Alabama *a k*	14.30	3.20	3.92	24.70	52.23	1.65	3.7	4.6	28.9	60.9	1.9	do	994
995	Cut in 1878; grown in Texas *a k*	14.30	6.20	4.23	31.52	42.33	1.42	7.2	4.9	36.8	49.4	1.7	do	995
	Smooth paspalum (*Paspalum lævе*):													
996	Cut in 1878; grown in Texas *a k*	14.30	6.60	6.95	23.66	46.13	2.36	7.7	8.1	27.6	53.8	2.8	do	996
997	Cut Aug. 23 to 29, 1880; grown in Pennsylvania *a k*	14.30	5.91	7.00	20.14	50.80	1.85	6.9	8.1	23.5	59.3	2.2	do	997
	Pearl millet (*Penicillaria spicata*):													
998	Cut Sept. 10; unfertilized	8.10	6.51	7.45	31.52	45.60	0.82	7.1	8.1	34.3	49.6	0.9	Mass. State Ex. Sta. Rep., 1885, p. 56	998
999	Cut Sept. 10; fertilized	7.80	6.18	7.28	31.63	45.73	1.38	6.7	7.9	34.3	49.6	1.5	Mass. State Ex. Sta. Rep., 1885, p. 55	999
	Timothy, herd's grass (of New England and New York) (*Phleum pratense*):													
1000	Cut June 23, 1879; grown in Connecticut *k*	14.30	3.27	4.88	32.81	43.29	1.45	3.8	5.7	38.2	50.5	1.8	Conn. State Ex. Sta. Rep., 1879, p. 79	1000
1001	Cut July 1, 1878; grown in New Hampshire *k*	14.30	4.10	6.20	25.30	48.10	2.00	4.8	7.2	29.5	56.2	2.3	do	1001
1002	Cut July 11, 1878; grown in New Hampshire *k*	14.30	3.80	5.30	27.50	47.20	1.90	4.4	6.2	32.1	55.1	2.2	do	1002
1003	Cut July 20 to 25, 1877; grown in Connecticut *k*	14.30	4.38	5.57	29.48	45.19	1.08	5.1	6.5	34.3	52.8	1.3	do	1003
1004	Cut July 21 to 28, 1877; grown in Connecticut *k*	14.30	4.60	6.90	26.80	45.40	2.00	5.4	8.0	31.3	53.0	2.3	do	1004

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS--Continued.													
	HAY OF GRASSES—continued.													
	Timothy, herd's grass (of New England and New York) (*Phleum pratense*)—Cont'd.	%	%	%	%	%	%	%	%	%	%	%		
1005	Time of cuttiug unknown	8.90	4.64	5.31	29.60	48.58	2.97	5.1	5.8	32.5	53.3	3.3	N. J. Ex. Sta. Rep., 1880, p. 46	1005
1006	Do	13.47	3.86	7.63	29.26	43.48	2.30	4.5	8.8	33.8	50.2	2.7	Conn. State Ex. Sta. Rep., 1881, p. 87	1006
1007	Cut in full bloom; grown in Maine	10.70	3.80	6.00	27.70	48.50	3.30	4.3	6.7	31.0	54.3	3.7	Agr. of Me., 1882, p. 297	1007
1008	Cut past bloom; grown in Maine	7.80	3.60	4.60	30.20	51.00	2.80	3.9	5.0	32.7	55.4	3.0	Agr. of Me., 1882, p. 298	1008
1009	Time of cutting unknown	11.96	4.28	6.44	34.25	41.09	1.98	4.9	7.3	39.1	46.4	2.3	N. J. Ex. Sta. Rep., 1882, p. 71	1009
1010	Cut after bloom	8.70	3.69	6.62	33.41	45.65	1.93	4.0	7.2	36.6	50.1	2.1	Mass. State Ex. Sta. Rep., 1883, p. 80	1010
1011	Cut in full bloom; grown in Maine	12.20	4.95	6.25	26.81	46.99	2.80	5.7	7.2	30.4	53.5	3.2	Agr. of Me., 1883, p. 432	1011
1012	Cut out of bloom; grown in Maine	12.40	4.02	5.00	26.83	49.25	2.50	4.6	5.7	30.6	56.2	2.9	do	1012
1013	Cut 1881, in bloom (eastern farm); weight,* 3,634; weight of dry hay, 2,307.	9.53	4.55	7.29	33.36	43.04	2.23	5.0	8.1	36.9	47.5	2.5	Pa. State Col. Bul. 5, 1883, p. 41	1013
1014	Cut 1881, nearly ripe (eastern farm); weight,* 4,234; weight of dry hay, 3,390.	9.46	3.33	5.14	32.35	47.57	2.15	3.7	5.7	35.7	52.5	2.4	do	1014
1015	Cut 1882, in bloom (eastern farm); weight,* 3,634; weight of dry hay, 2,556.	8.96	2.50	5.79	36.10	44.51	2.14	2.8	6.4	39.6	48.9	2.3	do	1015
1016	Cut 1882, nearly ripe (eastern farm); weight,* 3,802; weight of dry hay, 3,168.	8.88	2.79	5.31	32.71	47.71	2.60	3.1	5.8	35.9	52.4	2.8	do	1016
1017	Cut 1881, in bloom (central farm); weight,* 5,000; weight of dry hay, 3,922.	10.27	4.31	5.23	33.84	44.32	2.03	4.8	5.8	37.7	49.4	2.3	do	1017
1018	Cut 1881, nearly ripe (central farm); weight,* 5,270; weight of dry hay, 4,035.	10.06	3.67	4.27	32.02	48.03	2.01	4.1	4.7	35.6	53.4	2.2	do	1018
1019	Cut 1882, in bloom (central farm); weight,* 3,570; weight of dry hay, 3,037.	7.00	3.40	5.39	37.11	44.86	2.24	3.7	5.8	39.9	48.2	2.4	do	1019
1020	Cut 1882, nearly ripe (central farm); weight,* 4,017; weight in dry hay, 3,413.	7.00	3.30	4.88	33.39	49.09	2.34	3.6	5.3	35.9	52.7	2.5	do	1020
1021	Just out of bloom	10.55	4.19	8.07	26.13	48.69	2.37	4.7	9.0	29.2	54.4	2.7	Mass. Ex. Sta. Rep., 1884, p. 58	1021
1022	Time of cutting unknown	6.50	3.00	5.06	24.34	58.52	2.58	3.2	5.4	26.0	62.6	2.8	Mo. State Agr. Col. Farm Bul. 11, 1884, p. 5.	1022
1023	Cut June 20, 1880; grown in Pennsylvania *a k*	14.30	4.33	7.82	21.72	49.06	2.77	5.1	9.1	25.4	57.2	3.2	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	1023
1024	Cut 1881; grown in New Hampshire *a k*	14.30	3.92	4.96	24.23	48.99	3.60	4.6	5.7	28.3	57.2	4.2	do	1024
1025	Cut 1882; grown in Indiana *a k*	14.30	6.04	4.73	27.65	45.41	1.87	7.1	5.6	32.2	53.0	2.2	do	1025
1026	Grown in Massachusetts	8.30	5.61	8.95	27.68	47.12	2.34	6.1	9.7	30.2	51.4	2.6	Mass. Ex. Sta. Rep., 1885, p. 80	1026
1027	Cut 1884; sample taken 1885; grown in Maine.	10.95	4.00	7.00	30.60	45.10	2.35	4.5	7.9	34.3	50.7	2.6	Me. Ex. Sta. Rep. 1885-'86, p. 51	1027
1028	Cut 1885, in bloom; sample taken from field;	7.05	6.02	7.13	35.80	40.59	3.41	6.5	7.7	38.5	43.6	3.7	do	1028

1029	Cut two weeks after bloom; grown in Maine.	11.34	3.75	5.04	28.89	47.41	2.67	4.2	6.7	32.6	53.5	3.0	Me. Ex. Sta. Rep., 1886–'87, p. 68	1029
1030	Do	9.35	3.48	5.19	28.60	50.51	2.87	3.8	5.7	31.6	55.7	3.2	do	1030
1031	Taken from stack; not well cured; bleached by rains; cut when very ripe; seeds mostly shelled out; coarse and woody.	12.27	3.03	4.24	33.58	45.46	1.42	3.5	4.8	38.3	51.8	1.6	Ky. Ex. Sta. Bul. 5, 1886, p. 15	1031
1032	Taken from stack; cut when nearly ripe; grown on bottom land, black soil; affected by drouth.	8.05	5.10	6.03	29.97	48.78	2.07	5.5	6.6	32.6	53.1	2.2	do	1032
1033	Taken from stack; cut at ripening of seeds; grown on black soil; coarse and woody.	9.17	4.33	4.86	32.33	47.82	1.49	4.8	5.4	33.6	52.6	1.6	do	1033
1034	Cut in ripening stage; grown in Blue-Grass Region; not as good as usual.	13.97	2.68	4.73	38.46	39.19	0.97	3.1	5.5	44.7	45.6	1.1	do	1034
1035	Do	15.54	3.70	4.80	35.89	38.45	1.62	4.4	5.7	42.5	45.5	1.9	do	1035
1036	Grown in New Jersey *b*	8.67	4.20	9.19	30.30	46.02	1.62	4.6	10.1	33.2	50.3	1.8	N. J. Ex. Sta. Rep., 1886, p. 158	1036
1037	Do.*b*	7.43	3.43	6.63	28.27	51.92	2.32	3.7	7.1	30.5	56.2	2.5	do	1037
1038	Do.*b*	6.47	3.77	6.50	24.55	56.73	1.98	4.0	6.9	26.3	60.7	2.1	do	1038
1039	Do.*b*	6.99	4.68	6.03	28.37	51.51	1.82	5.1	7.1	30.5	55.4	1.9	do	1039
1040	Do.*b*	7.43	4.85	6.19	29.25	50.45	1.83	5.3	6.7	31.6	54.5	1.9	do	1040
1041	Do.*b*	7.25	3.64	5.13	30.98	51.26	1.74	3.9	5.5	33.4	55.4	1.8	do	1041
1042	Do.*b*	7.50	4.93	7.31	27.63	50.86	1.77	5.3	7.8	29.9	55.0	2.0	do	1042
1043	Do.*b*	7.40	5.38	6.50	31.28	47.92	1.52	5.8	7.0	33.8	51.8	1.6	do	1043
1044	Do.*b*	6.12	3.56	3.75	27.71	57.08	1.78	3.8	4.0	29.5	60.7	2.0	do	1044
1045	Do.*b*	6.57	4.77	4.69	28.95	53.10	1.92	5.1	5.0	31.0	56.8	2.1	do	1045
1046	Grown in Vermont	6.65	5.28	9.60	31.61	43.00	3.77	5.6	10.4	33.9	46.1	4.0	Vt. Ex. Sta. Rep., 1887, p. 122	1046
1047	Grown in Missouri	7.20	5.54	7.19	29.35	47.88	2.84	5.9	7.7	31.7	51.7	3.0	Mo. State Agr. Col. Farm Bul. 27, 1387, p. 6.	1047
1048	In full bloom *a*	8.32	4.20	7.50	29.04	46.74	3.30	4.6	8.2	32.7	50.9	3.6	Me. Ex. Sta. Rep., 1888, p. 86	1048
1049	Past bloom *a*	12.60	4.52	6.85	28.05	44.84	3.14	5.2	7.8	32.1	51.3	3.6	do	1049
1050	Time of cutting unknown	10.78	6.34	7.81	31.72	41.00	2.35	7.1	8.7	35.6	46.0	2.6	Mass. State Ex. Sta. Rep., 1888, p. 36	1050
1051	Do	15.10	4.32	7.95	26.50	44.13	2.00	5.1	9.4	31.2	51.9	2.4	Ark. Ex. Sta. Rep., 1888, p. 133	1051
1052	Cut June 25; in full bloom 2 days *a*	23.61	5.34	5.35	23.76	38.07	3.87	7.0	7.0	31.1	49.8	5.1	Ill. Ex. Sta. Bul. 5, 1889	1052
1053	Do.*a*	25.58	5.09	5.53	24.08	36.30	3.42	6.8	7.4	32.4	48.8	4.6	do	1053
1054	Do.*a*	28.03	4.43	5.04	24.42	34.65	3.43	6.1	7.0	33.9	48.2	4.8	do	1054
1055	Do.*a*	28.88	5.17	5.50	22.20	34.27	3.98	7.3	7.9	31.1	48.2	5.5	do	1055
	Average *h i j*	**26.53**	**5.01**	**5.39**	**23.60**	**35.79**	**3.68**	**6.8**	**7.3**	**32.1**	**48.8**	**5.0**		
1056	Cut July 2; pollen shed; half the anthers fallen *a*.	20.86	5.37	5.09	27.91	37.14	3.63	6.8	6.6	35.2	46.8	4.6	do	1056
1057	Do.*a*	21.59	5.09	5.49	27.50	36.97	3.36	6.5	7.0	35.1	47.1	4.3	do	1057
1058	Do.*a*	20.03	5.43	5.25	25.85	39.94	3.50	6.8	6.6	32.3	50.0	4.3	do	1058
1059	Do.*a*	20.53	5.20	4.87	25.73	40.03	3.64	6.5	6.1	32.4	50.4	4.6	do	1059
	Average *h i j*	**20.75**	**5.27**	**5.20**	**26.76**	**38.48**	**3.54**	**6.6**	**6.6**	**33.7**	**48.6**	**4.5**		
1060	Cut July 11; lower leaves partly brown; seed in dough. *a*	23.32	4.71	4.03	25.82	39.47	2.65	6.1	5.3	33.7	51.5	3.4	do	1060
1061	Do.*a*	23.90	6.23	4.99	25.19	36.53	3.16	8.2	6.6	33.1	48.0	4.1	do	1061
1062	Do.*a*	23.17	4.48	4.70	25.71	38.81	3.13	5.8	6.1	33.5	50.5	4.1	do	1062

* When put in barn, pounds per acre.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF GRASSES—continued.													
	Timothy, herd's grass (of New England and New York) (*Phleum pratense*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1063	Cut July 11: lower leaves partly brown; seed in dough. *a*	23.24	5.21	5.04	28.84	34.90	2.77	6.8	6.6	37.5	45.5	3.6	Ill. Ex. Sta. Bul. 5, 1889	1063
	Average *h i j*	**23.41**	**5.16**	**4.69**	**26.39**	**37.43**	**2.92**	**6.7**	**6.1**	**34.5**	**48.9**	**3.8**		
1064	Cut July 23: more than half the seed ripe; quarter of the leaves brown. *a*	22.72	4.78	4.71	24.80	40.39	2.60	6.2	6.1	32.1	52.2	3.4	do	1064
1065	Do. *a*	22.48	4.41	4.74	26.50	39.27	2.60	5.7	6.1	34.2	50.6	3.4	do	1065
1066	Do. *a*	22.72	4.50	5.07	26.97	37.98	2.77	5.8	6.6	34.9	44.1	3.6	do	1066
1067	Do. *a*	18.63	4.78	4.98	27.75	41.25	2.61	5.9	6.1	34.1	50.7	3.2	do	1067
	Average *h i j*	**21.64**	**4.60**	**4.88**	**26.52**	**39.71**	**2.65**	**5.9**	**6.2**	**33.8**	**50.7**	**3.4**		
	All analyses of timothy. Maximum	28.88	6.34	9.69	38.46	58.52	3.98	8.2	10.4	44.7	62.6	5.5		
	All analyses of timothy. Minimum	6.12	2.50	3.75	22.20	34.27	0.97	2.8	4.0	25.4	43.7	1.1		
	All analyses of timothy. Average	**13.18**	**4.37**	**5.87**	**29.03**	**45.08**	**2.47**	**5.1**	**6.8**	**33.5**	**51.7**	**2.9**		
	Twelve analyses, cut in full bloom.* Maximum	28.88	6.02	7.50	37.11	48.50	3.98	7.3	9.4	39.9	54.3	5.5		
	Twelve analyses, cut in full bloom.* Minimum	7.00	2.50	5.04	22.20	34.27	2.03	2.8	5.8	31.0	43.9	2.3		
	Twelve analyses, cut in full bloom.* Average	**15.01**	**4.48**	**6.01**	**29.59**	**41.90**	**3.01**	**5.3**	**7.1**	**34.7**	**49.4**	**3.5**		
	Eleven analyses, cut soon after bloom.† Maximum	21.59	5.37	8.07	33.41	51.00	3.64	6.8	9.0	36.6	56.2	4.6		
	Eleven analyses, cut soon after bloom.† Minimum	7.80	3.48	4.60	25.73	36.97	1.93	3.8	5.0	29.2	46.8	2.1		
	Eleven analyses, cut soon after bloom.† Average	**14.16**	**4.39**	**5.73**	**28.10**	**44.67**	**2.95**	**5.1**	**6.6**	**32.7**	**52.1**	**3.5**		
	Twelve analyses, cut when nearly ripe.‡ Maximum	22.72	5.10	6.03	38.46	49.09	2.77	8.2	6.6	44.7	53.4	3.8		
	Twelve analyses, cut when nearly ripe.‡ Minimum	7.00	2.68	4.27	24.80	37.98	0.97	3.1	4.7	32.1	44.1	1.1		
	Twelve analyses, cut when nearly ripe.‡ Average	**14.05**	**3.94**	**4.96**	**31.10**	**43.80**	**2.15**	**4.5**	**5.8**	**36.2**	**50.9**	**2.6**		

	English blue grass, wire grass (*Poa compressa*):													
1068	Cut in 1879; grown in New Hampshire *a k*	14.30	4.46	7.56	21.73	49.00	2.95	5.2	8.8	25.4	57.2	3.4	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	1068
1069	Cut June 10, 1880; grown in Pennsylvania *a k*	14.30	6.73	7.66	17.91	50.11	3.20	7.9	8.9	20.9	58.5	3.8	do	1069
1070	Cut June 6, 1880; grown in Delaware *a k*	14.30	5.60	11.53	17.27	47.66	3.64	6.5	13.5	20.1	55.6	4.3	do	1070
	Kentucky blue grass, June grass (*Poa pratensis*):													
1071	Grown in Wisconsin *a k*	14.30	4.46	9.89	23.94	44.06	2.45	5.2	11.5	27.0	52.5	2.9	do	1071
1072	Grown in New Hampshire *a k*	14.30	4.69	6.43	19.26	51.08	4.24	5.5	7.4	22.5	59.6	5.0	do	1072
1073	Cut May 17; grown in Illinois *a k*	14.30	6.70	12.94	21.36	41.47	3.23	7.8	15.1	24.9	48.4	3.8	do	1073
1074	Cut June 16; grown in North Carolina *a k*	14.30	7.72	12.48	20.08	41.09	3.73	9.0	14.6	24.1	47.9	4.4	do	1074
1075	Cut May 26; grown in Pennsylvania *a k*	14.30	6.41	12.19	17.69	45.48	3.93	7.5	14.2	20.6	53.1	4.6	do	1075
1076	Cut two weeks after ripening; taken from stack; not well cured; stems hard and woody.	16.09	4.69	7.07	26.76	43.37	2.02	5.6	8.4	31.9	51.7	2.4	Ky. Ex. Sta. Bul. 5, 1886, p. 23	1076
1077	Cut June 14; seeds in milk *a*	22.46	7.36	6.44	24.90	35.38	3.50	9.5	8.3	32.1	45.7	4.4	Ill. Ex. Sta. Bul. 5, 1889	1077
1078	Do. *a*	23.43	7.58	6.03	24.54	34.91	3.51	9.9	7.9	32.0	45.6	4.6	do	1078
1079	Do. *a*	26.47	5.77	6.11	23.88	33.70	4.07	7.8	8.3	32.5	45.9	5.5	do	1079
1080	Do. *a*	25.07	7.25	6.63	24.47	33.18	3.40	9.8	8.9	32.6	44.2	4.5	do	1080
1081	Cut June 21, 22; heads yellow; seeds ripe *a*	23.69	7.76	6.00	25.73	33.67	3.15	10.2	7.9	33.7	44.1	4.1	do	1081
1082	Do. *a*	25.36	7.10	6.53	24.45	33.21	3.35	9.6	8.7	32.8	44.4	4.5	do	1082
1083	Do. *a*	32.82	5.06	5.29	20.44	33.56	2.83	7.5	7.9	30.4	50.0	4.2	do	1083
1084	Do. *a*	29.32	5.72	5.55	24.86	31.79	2.76	8.1	7.9	35.2	44.9	3.9	do	1084
1085	Summer pasture (aftermath), from July 20 to Sept. 10; average composition. *a*	47.05	4.50	8.23	15.39	22.34	2.49	8.5	15.5	29.0	42.3	4.7	do	1085
1086	Winter pasture (aftermath); cut in February. *a*	44.18	5.74	5.97	14.02	28.36	1.73	10.3	10.7	25.1	50.8	3.1	do	1086
	Average 4 analyses, cut when seed was in milk. §	**24.36**	**7.00**	**6.30**	**24.47**	**34.27**	**3.60**	**9.2**	**8.3**	**32.3**	**45.4**	**4.8**		
	Average 4 analyses, cut when seed was ripe. ‖	**27.80**	**6.39**	**5.84**	**23.84**	**33.11**	**3.02**	**8.8**	**8.1**	**33.0**	**45.9**	**4.2**		
	Teosinte (*Euchlæna luxurians*), from the same root:													
1087	First growth, height 10 feet	6.78	7.63	6.81	29.95	45.93	2.90	8.2	7.3	32.1	49.3	3.1	Vt. Ex. Sta. Rep., 1887, p. 129	1087
1088	Second growth, height 6 feet; produced no seed.	3.31	8.86	8.15	28.37	48.81	2.50	9.2	8.4	29.3	50.5	2.6	Vt. Ex. Sta. Rep., 1887, p. 130	1088
	Hungarian grass, German millet (*Setaria italica*):													
1089	Dried	4.85	5.19	5.56	31.27	50.91	2.24	5.4	5.9	32.9	53.4	2.4	N. J. Ex. Sta. Rep., 1880, p. 47	1089
1090	Time of cutting unknown	6.93	5.62	7.55	26.95	50.19	2.76	6.0	8.2	29.0	53.8	3.0	N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41.	1090
1091	Do	8.70	5.90	6.80	26.40	48.70	3.50	6.5	7.4	29.0	53.3	3.8	Agr. of Me., 1882, p. 300	1091
1092	In bloom	7.45	5.30	8.75	29.58	46.87	2.05	5.7	9.5	32.0	50.6	2.2	Mass. State Ex. Sta. Rep., 1889, p. 293.	1092
1093	Cut July 24, grown in Pennsylvania *a k*	14.30	6.43	8.13	21.02	47.80	2.32	7.5	9.5	24.5	55.8	2.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	1093
1094	Cut immediately after full bloom; cured in barn; grown on black alluvial soil.	9.54	6.65	7.81	25.82	47.81	2.37	7.4	8.6	28.5	52.9	2.6	Ky. Ex. Sta. Bul. 5, 1886, p. 20	1094

* Nos. 1007, 1011, 1013, 1015, 1017, 1019, 1028, 1048, 1052–1055.
‡ Nos. 1014, 1016, 1018, 1020, 1032, 1033, 1034, 1035, 1064–1067.
† Nos. 1008, 1010, 1012, 1021, 1029, 1030, 1049, 1056, 1057, 1058. 1059.
§ Nos. 1077–1080.
‖ Nos. 1081–1084.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF GRASSES—continued.													
		%	%	%	%	%	%	%	%	%	%	%		
1095	Hungarian grass, German millet (*Setaria italica*): Time of cutting unknown	7.10	6.70	6.19	30.25	47.93	1.83	7.2	6.7	32.6	51.6	1.9	N. J. Ex. Sta. Rep., 1886, p. 160	1095
1096	Do	9.05	5.03	12.25	27.35	44.62	1.70	5.5	13.5	30.1	49.0	1.9	do	1096
1097	Do	8.28	7.46	12.60	25.65	44.42	2.19	8.1	13.1	28.0	48.4	2.4	do	1097
1098	Do	8.14	6.72	7.06	23.58	52.82	1.68	7.3	7.7	25.6	57.5	1.9	do	1098
1099	Do	7.28	5.48	5.94	29.92	49.93	1.45	5.9	6.4	32.3	53.8	1.6	do	1099
1100	Do	7.65	6.11	5.00	27.81	51.53	1.90	6.6	5.4	30.1	55.8	2.1	do	1100
1101	Do	6.78	5.75	4.69	28.13	52.97	1.68	6.2	5.1	30.2	56.7	1.8	do	1101
	All analyses, excluding No. 1093. Maximum	9.54	7.46	12.25	31.27	52.97	3.50	8.1	13.5	32.9	57.5	3.8		
	Minimum	4.85	5.03	4.69	23.58	44.42	1.45	5.4	5.1	24.5	48.4	1.6		
	Average	**7.66**	**5.99**	**7.46**	**27.72**	**49.05**	**2.12**	**6.5**	**8.1**	**30.0**	**53.1**	**2.3**		
	Johnson grass or Mean's grass (*Sorghum halepense*):													
1102	Cut in 1878; grown in Alabama *a k*	14.30	6.92	10.11	21.47	44.77	2.43	8.1	11.8	25.1	52.2	2.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884, p. 126.	1102
1103	Cut Sept. 1	6.10	5.21	4.35	35.45	47.11	1.78	5.5	4.6	37.9	50.1	1.9	Ga. Ex. Sta. Bul. 7, 1890	1103
	Fresh-water cord grass (*Spartina cynosuroides*):													
1104	Cut in 1879; grown in Minnesota *a k*	14.30	6.19	8.41	22.10	46.07	2.93	7.2	9.8	25.8	53.8	3.4	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	1104
1105	Cut in 1879; grown in Illinois *a k*	14.30	5.61	5.55	19.62	52.38	2.54	6.6	6.4	22.9	61.1	3.0	do	1105
1106	Cut in 1879; grown in Indian Territory *a k*	14.30	4.46	4.18	23.31	50.84	2.91	5.2	4.9	27.2	59.3	3.4	do	1106
1107	Cut Aug. 5, in bloom; grown on muddy banks of a creek; at high tide partly submerged.	8.16	6.18	5.62	30.79	47.43	1.82	6.8	6.1	33.5	51.6	2.0	Conn. State Ex. Sta. Rep., 1889, p. 245.	1107
	Red salt grass (*Spartina juncea*):													
1108	Cut in 1888; grown on salt marsh	6.74	9.00	4.50	24.30	53.22	2.24	9.7	4.8	26.0	57.1	2.4	Conn. State Ex. Sta. Rep., 1889, p. 243.	1108
1109	Cut June 22, 1889; spike not visible; growth thick, but low; grown on salt marsh.	10.10	7.02	6.37	26.80	47.08	2.63	7.8	7.1	29.8	52.4	2.9	do	1109
1110	Cut July 13, 1889; in bloom*	9.22	12.19	6.50	26.14	43.64	2.31	13.4	7.2	28.8	48.1	2.5	do	1110
1111	Cut Aug. 5, 1889; in seed*	9.01	5.78	4.44	27.18	51.09	2.50	6.4	4.9	29.9	56.1	2.7	do	1111
1112	Cut Sept. 14, 1889; seed gone.*	8.15	5.08	4.13	26.72	53.17	2.75	5.5	4.5	29.1	57.9	3.0	do	1112
	Creek sedge (*Spartina stricta*, var. *glabra*):													
1113	Cut July 5; spikes not visible†	9.72	15.30	8.44	25.53	39.02	1.99	16.9	9.4	28.3	43.2	2.2	Conn. State Ex. Sta. Rep., 1889, p. 244.	1113

1114	Cut Aug. 5; in bloom	8.18	8.48	6.81	26.72	47.75	2.06	9.2	7.4	29.1	52.1	2.2	do	1114
1115	Grown on banks of a creek of brackish water; 6 feet high; cut Aug. 12; in bloom.	7.37	8.33	4.00	27.28	51.25	1.77	0.0	4.3	29.5	55.3	1.9	do	1115
1116	Grown on banks of a creek of salt water; 6 feet high; out Aug. 12; in bloom.	8.13	11.85	6.06	27.70	44.02	2.24	12.9	6.6	30.1	48.0	2.4	do	1116
1117	Grown in middle of a salt marsh near Nos. 1113 and 1116; 1 foot high; cut Aug. 12; in bloom.	8.25	9.66	7.62	27.39	44.90	2.18	10.5	8.3	29.8	49.0	2.4	do	1117
	Maximum	9.72	15.30	8.44	27.70	51.25	2.24	16.9	9.4	30.1	55.3	2.4		
	Minimum	7.37	8.33	4.00	25.53	39.02	1.77	9.0	4.3	28.3	43.2	1.9		
	Average	**8.33**	**10.72**	**6.59**	**26.92**	**45.39**	**2.05**	**11.6**	**7.1**	**29.3**	**49.7**	**2.3**		
	Gama grass, sesame grass (*Tripsacum dactyloides*):													
1118	Cut in 1878; grown in Mississippi *a k*	14.30	5.30	7.37	22.72	48.26	2.05	6.2	8.6	26.5	56.3	2.4	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	1118
1119	Cut Aug. 11, 1880; grown in Pennsylvania *a k*	14.30	4.58	6.80	19.24	52.11	2.97	5.3	7.9	22.5	60.8	3.5	do	1119
	Broad-flowered fescue grass (*Uniola latifolia*):													
1120	Cut in 1879; grown in Alabama *a k*	14.30	12.55	9.32	31.91	29.25	2.67	14.6	10.9	37.2	34.2	3.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	1120
1121	Cut in 1879; grown in Indian Territory *a k*	14.30	8.93	5.55	21.13	47.94	1.75	10.4	6.5	24.7	55.9	2.5	do	1121
	Wild rice, Indian rice (*Zizania aquatica*):													
1122	Cut July 13, coming into bloom; grown on a river bank.	9.86	16.95	8.56	25.44	36.28	2.91	18.8	9.5	28.2	40.3	3.2	Conn. State Ex. Sta. Rep., 1889, p. 245.	1122
1123	Cut Aug. 5, in bloom; grown on a river bank *k*	8.23	14.25	7.12	31.06	37.29	2.05	15.5	7.8	33.8	40.7	2.2	do	1123
1124	Northern or mountain redtop (*Agrostis exarata*), cut in 1878; grown in Wisconsin. *a k*	14.30	5.10	9.09	21.01	48.53	1.97	5.9	10.7	24.5	56.6	2.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	1124
1125	Beard grass (*Andropogon argenteus*), cut in 1880; grown in Indian Territory. *a k*	14.30	3.11	3.20	21.76	55.01	2.62	3.6	3.7	25.4	64.2	3.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	1125
1126	Heavy-topped broom grass (*Andropogon macrourus*), grown in Alabama. *a k*	14.30	3.21	4.94	25.50	49.87	2.18	3.7	5.7	29.8	58.2	2.6	do	1126
1127	Broom sedge (*Andropogon virginicus*), cut in 1878; grown in Texas. *a k*	14.30	8.00	2.57	28.35	45.35	1.43	9.3	3.0	33.1	52.9	1.7	do	1127
1128	Beard grass, three-awned grass (*Aristida purpurascens*), grown in Indian Territory. *a k*	14.30	5.81	3.70	21.32	52.59	2.22	6.9	4.3	24.9	61.3	2.6	do	1128
1129	Wild oat grass (*Avena striata*), cut in 1879; grown in Vermont. *a k*	14.30	4.25	7.50	22.42	48.10	3.43	4.9	8.8	26.2	56.1	4.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	1129
1130	Grama grass, mesquite grass (*Bouteloua oligostachya*), cut in 1879; grown in Minnesota. *a k*	14.30	6.69	7.35	19.41	49.58	2.67	7.8	8.6	22.7	57.8	3.1	do	1130
1131	Mesquite grass, tall grama grass (*Bouteloua racemosa*), cut when ripe; grown in Colorado.	8.80	9.20	3.82	21.81	54.67	1.70	10.1	4.2	23.9	59.9	1.9	Colo. Ex. Sta. Bul. No. 8, 1889	1131
1132	Chess, cheat (*Bromus carinatus*), cut in 1878; grown in Illinois. *a k*	14.30	9.32	8.50	22.91	42.67	2.30	10.9	9.9	26.7	49.8	2.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128.	1132
1133	Chess, cheat (*Bromus secalinus*), cut in 1879; grown in New Hampshire. *a k*	14.30	6.10	6.61	20.39	49.11	3.49	7.1	7.7	23.8	57.3	4.1	do	1133
1134	Schrader's grass, rescue grass (*Bromus unioloides*), cut in 1879; grown in District of Columbia. *a k*	14.30	8.35	11.67	17.64	44.97	3.07	9.7	13.6	20.6	52.5	3.6	do	1134

* Grown on same salt marsh.

† Grown on muddy banks of a creek.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF GRASSES—continued.	%	%	%	%	%	%	%	%	%	%	%		
1135	Wood reed grass (*Cinna arundinacea*), grown in Indian Territory. *a k*	14.30	5.73	5.33	25.40	46.69	2.55	6.7	6.2	29.6	54.5	3.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884. p. 127.	1135
1136	Mountain oat grass (*Danthonia compressa*), cut in 1874; grown in Vermont. *a k*	14.30	3.06	6.84	25.98	46.80	3.02	3.6	8.0	30.3	54.6	3.5	do	1136
1137	Panic grass (*Panicum filiforme*), cut in 1878; grown in Alabama. *a k*	14.30	7.57	2.54	22.14	52.24	1.27	8.8	3.0	25.8	60.9	1.5	U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 125.	1137
1138	Spike grass, salt grass (*Distichlis maritima*), cut Aug. 31. 1889; grown in Connecticut.	9.22	6.99	5.44	26.38	49.42	2.55	7.7	6.0	29.1	54.4	2.8	Conn. State Ex. Sta. Rep., 1889. p. 244.	1138
1139	Wild rye (*Elymus canadensis*), cut in 1879; grown in Indian Territory. *a k*	14.30	5.87	3.70	21.32	52.59	2.22	6.0	4.8	34.7	50.8	3.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 128.	1139
1140	Wild rye (*Elymus virginicus*), cut June 28, 1889, before bloom; grown in Connecticut.	6.87	7.09	7.62	32.01	44.36	2.05	7.6	8.2	34.4	47.6	2.2	Conn. State Ex. Sta. Rep., 1889, p. 245.	1140
1141	Teosinte (*Euchlæna luxurians*), in full bloom. *c*	6.06	6.57	9.10	27.13	49.92	1.22	7.0	9.7	28.9	53.1	1.3	Mass. State Ex. Sta. Rep., 1889. p. 178.	1141
1142	Sheep's fescue (*Festuca ovina*), grown in New Hampshire. *k*	14.30	4.31	5.60	72.14		3.65	5.0	6.5	84.2		4.3	U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 127.	1142
1143	Reed meadow grass, white spear grass (*Glyceria aquatica*), cut in 1879; grown in Vermont. *a k*	14.30	6.26	6.97	21.94	48.64	1.89	7.3	8.1	25.6	56.8	2.2	do	1143
1144	Vanilla or Seneca grass, holy grass (*Hierochloa borealis*), cut in 1878; grown in Illinois. *a k*	14.30	7.99	12.12	19.73	42.38	3.48	9.3	14.1	23.0	49.5	4.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 126.	1144
1145	Feather or slender grass (*Leptochloa mucronata*), cut in 1878; grown in Texas. *a k*	14.30	10.08	6.60	27.20	40.06	1.76	11.8	7.7	31.7	46.8	2.0	U. S. Dept. Agr., Chem. Comp. Am. Grasses. 1884. p. 127.	1145
1146	English rye grass (*Lolium pérenne*) grown in Pennsylvania. *a k*	14.30	5.22	7.60	35.65	54.80	2.43	6.1	8.8	18.3	63.0	2.8	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 128.	1146
1147	Wild millet (*Milium effusum*), cut in 1880; grown in Vermont. *a k*	14.30	7.95	13.69	21.05	39.69	3.32	9.3	16.0	24.5	46.3	3.9	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	1147
1148	Spiked muhlenbergia (*Muhlenbergia glomerata*), cut in 1879; grown in Minnesota. *a k*	14.30	12.87	17.42	15.15	35.32	4.94	15.0	20.3	17.7	41.2	5.8	do	1148
1149	Wood grass (*Muhlenbergia mexicana*), cut Aug. 22, 1880; grown in Pennsylvania. *a k*	14.30	3.71	4.13	19.45	56.11	2.30	4.3	4.8	22.7	65.5	2.7	do	1149
1150	Drop seed (*Muhlenbergia*, sp.), cut in 1879; grown in New Hampshire. *a k*	14.30	5.43	11.48	19.52	46.07	3.20	6.3	13.4	22.8	53.8	3.7	do	1150
1151	Redtop panic (*Panicum agrostoides*), cut in 1879; grown in Indian Territory. *a k*	14.30	5.73	5.05	26.45	43.59	4.88	6.7	5.9	30.8	50.9	5.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	1151
1152	Old witch grass, hair-stalked panic (*Panicum capillare*), cut in 1879; grown in Indian Territory. *a k*	14.30	4.89	5.98	24.20	47.39	3.34	5.6	7.0	28.2	55.3	3.9	do	1152

1153	Panic grass (*Panicum dichotomum*), cut in 1879; grown in Alabama. *a k*	14.30	8.68	5.80	25.27	42.91	3.09	10.1	6.7	29.5	50.1	3.6	do	1153
1154	Cane-like panic (*Panicum divaricatum*), cut in 1879; grown in Alabama. *a k*	14.30	12.25	7.92	23.19	40.18	2.16	14.3	9.2	27.1	46.9	2.5	do	1154
1155	Panic grass (*Panicum gibbum*), cut in 1878; grown in Alabama. *a k*	14.30	7.31	10.47	20.71	43.65	3.56	8.5	12.3	24.1	50.9	4.2	do	1155
1156	Guinea grass (*Panicum jumentorum*), cut in 1878; grown in Alabama. *a k*	14.30	7.75	7.62	27.01	41.98	1.34	9.0	8.9	31.5	49.0	1.6	do	1156
1157	Obtuse flowered panic (*Panicum obtusum*), cut in 1878; grown in Texas. *a k*	14.30	9.38	6.21	28.38	39.89	1.93	10.9	7.3	33.1	46.4	2.3	do	1157
1158	Panic grass (*Panicum proliferum*), cut in 1879; very ripe and rank; grown in Alabama. *a k*	14.30	9.58	9.49	29.63	43.42	2.58	11.2	11.1	24.1	50.6	3.0	do	1158
1159	Texas millet (*Panicum texanum*), cut in 1878; grown in Texas. *a k*	14.39	8.65	4.79	23.16	47.97	2.12	10.1	5.5	27.0	54.9	2.5	do	1159
1160	*Paspalum ovatum*, grown in Maine *a k*	14.30	7.28	5.25	21.21	50.07	1.89	8.5	6.1	24.8	58.4	2.2	do	1160
1161	*Paspalum præcox*, cut in 1879; grown in Alabama. *a k*	14.39	6.35	5.98	21.69	49.49	3.09	7.4	5.9	25.3	57.8	3.6	do	1161
1162	Canary grass (*Phalaris intermedia*, var. *angusta*), cut in 1879; grown in South Carolina. *a k*	14.30	9.99	13.67	21.29	37.23	3.52	11.7	16.0	24.8	43.4	4.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	1162
1163	Tall spear grass, wood grass (*Poa alsodes*), cut June 2, 1880; grown in Pennsylvania. *a k*	14.39	8.06	11.86	18.21	44.06	3.51	9.4	13.8	21.3	51.4	4.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	1163
1164	Texas blue grass (*Poa arachnifera*), cut in 1882; grown in Texas. *a k*	14.30	9.96	9.10	27.33	36.13	3.18	11.6	10.6	31.9	42.2	3.7	do	1164
1165	Fowl meadow grass (*Poa serotina*), cut in 1878; grown in Wisconsin. *a k*	14.30	3.63	5.37	17.87	56.40	2.43	4.2	6.3	20.9	65.8	2.8	do	1165
1166	Pigeon grass, bottle grass, foxtail (*Setaria glauca*), cut Aug. 11, 1880; grown in Pennsylvania. *a k*	14.30	6.80	7.30	18.80	50.18	2.62	7.9	8.6	21.9	58.5	3.1	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 125.	1166
1167	Bristle grass, foxtail (*Setaria setosa*), cut in 1878; grown in Texas. *a k*	14.30	7.78	7.28	27.68	41.68	1.28	9.1	8.5	32.3	48.6	1.5	do	1167
1168	Wild oats (*Sorghum nutans*), cut in 1879; grown in Indian Territory. *a k*	14.30	4.46	3.32	24.53	51.21	2.18	5.2	3.9	28.6	59.8	2.5	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 126.	1168
1169	Smut grass (*Sporobolus indicus*), cut in 1879; grown in Mississippi. *a k*	14.39	6.93	10.55	22.90	44.28	2.80	7.0	12.3	25.7	51.7	3.3	do	1169
1170	Sand grass (*Triodia purpurea*), cut in 1879; grown in Indian Territory. *a k*	14.30	4.42	6.90	24.97	46.23	3.18	5.2	8.1	29.1	53.9	3.7	U. S. Dept. Agr., Chem. Comp. Am. Grasses, 1884, p. 127.	1170
1171	Tall redtop (*Triodia sesleroides*), cut in 1878; grown in Texas. *a k*	14.30	4.40	5.40	32.33	41.84	1.73	5.1	6.3	37.7	48.9	2.0	do	1171
	HAY OF LEGUMES.													
	Common red clover (*Trifolium pratense sesleroides*):													
1172	Time of cutting unknown	11.10	4.99	13.06	26.64	39.71	2.50	5.6	14.7	32.2	44.7	2.8	N. J. Ex. Sta. Rep., 1880, p. 46	1172
1173	Second growth	8.47	5.86	10.00	27.10	45.47	3.10	6.4	10.9	29.6	49.7	3.4	N. J. Ex. Sta. Rep., 1880, p. 47	1173
1174	Time of cutting unknown	21.82	5.13	10.88	24.67	35.03	2.47	6.2	13.9	31.6	45.3	3.0	N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41.	1174
1175	Cut May 24; heads beginning to form	11.00	7.49	20.75	15.60	41.14	4.02	8.4	23.3	17.5	46.3	4.5	Pa. State Col. Bul. 5, 1883, p. 44	1175
1176	Cut June 5; heads formed	9.73	6.98	16.59	21.09	42.38	3.23	7.7	18.4	23.4	47.9	3.5	do	1176
1177	Cut June 22; full bloom *h**	12.60	6.18	12.81	24.53	41.12	2.76	7.1	14.6	28.1	47.0	3.2	do	1177
1178	Cut July 3; some heads dead *h**	17.23	5.46	11.33	30.13	33.30	2.55	6.6	13.7	36.4	40.2	3.1	do	1178
1179	Cut July 19; heads all dead *h**	15.15	5.25	10.62	31.83	34.79	2.36	6.2	12.5	37.5	41.0	2.8	do	1179
1180	Time of cutting unknown	10.20	7.45	12.13	39.83	36.88	2.51	8.3	13.6	34.3	41.0	2.8	N. J. Ex. Sta. Rep., 1884, p. 106	1180

* Stored in barn five or six months.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF LEGUMES—continued.													
	Common red clover (*Trifolium pratense*)—Cont'd	%	%	%	%	%	%	%	%	%	%	%		
1181	Time of cutting unknown	16.13	4.29	11.31	27.12	39.58	1.57	5.1	13.5	32.3	47.2	1.9	Wis. Univ. Bul. 3, 1884, p. 6	1181
1182	Do	16.41	4.17	10.88	27.58	39.49	1.47	5.0	13.0	33.0	47.2	1.8	do	1182
1183	Do	15.41	3.88	11.61	27.27	40.04	1.79	4.6	13.7	32.2	47.4	2.1	do	1183
1184	Do	16.34	4.06	11.39	27.51	39.22	1.48	4.9	13.6	32.9	46.8	1.8	do	1184
1185	Cut July 13; in bloom	7.98	7.71	15.37	26.84	37.82	4.28	8.4	16.7	29.2	41.1	4.6	Me. Ex. Sta. Rep., 1885–'86, p. 51	1185
1186	First cut *b*	6.11	7.40	13.00	29.71	41.40	2.38	7.9	13.8	31.6	44.2	2.5	N. J. Ex. Sta. Rep., 1886, p. 138	1186
1187	Second cut *b*	7.12	8.33	13.81	25.82	42.05	2.87	9.0	14.9	27.8	45.2	3.1	do	1187
1188	First cut	7.88	6.59	13.56	27.28	42.81	1.88	7.1	14.8	29.6	46.4	2.1	do	1188
1189	Second crop *b*	8.45	6.71	13.00	27.65	42.44	1.75	7.3	14.2	30.2	46.3	2.0	do	1189
1190	First crop *b*	8.30	6.77	13.50	28.63	41.00	1.80	7.4	14.7	31.2	44.7	2.0	do	1190
1191	Time of cutting unknown	8.52	6.18	10.50	23.74	49.03	2.03	6.8	11.4	25.9	53.7	2.2	do	1191
1192	Do. *b*	8.50	6.42	13.50	24.60	44.60	2.38	7.0	14.7	26.9	48.8	2.6	do	1192
1193	Do. *b*	7.56	6.05	10.38	30.38	43.81	1.82	6.6	11.2	32.9	47.4	1.9	do	1193
1194	Do. *b*	7.62	4.95	10.31	35.65	39.27	2.20	5.4	11.2	38.6	42.4	2.4	do	1194
1195	Cut in full bloom; grown on black alluvial soil.*	9.80	7.86	14.22	25.53	38.91	3.68	8.7	15.8	28.3	43.1	4.1	Ky. Ex. Sta. Bul. 5, 1886, p. 11	1195
1196	Cut in bloom early in June; grown on rich upland; from stack.*	9.98	7.76	15.81	28.42	35.11	2.92	8.6	17.6	31.6	39.0	3.2	Ky. Ex. Sta. Bul. 5, 1886, p. 12	1196
1197	Cut in full bloom; grown on black alluvial soil; from barn.*	10.04	7.66	12.08	28.90	38.69	2.63	8.5	13.4	32.1	43.1	2.9	do	1197
1198	Cut in full bloom; grown on wet black gravel soil; from stack.*	10.70	6.31	10.63	26.32	43.42	2.62	7.1	11.9	29.5	48.6	2.9	Ky. Ex. Sta. Bul. 5, 1886, p. 13	1198
1199	Cut in full bloom early in June; grown on rich, level upland; fairly well cured and stored in barn.*	11.63	6.49	14.22	29.95	35.29	2.42	7.3	16.1	33.9	46.0	2.7	do	1199
1200	Cut when half of bloom had turned brown; grown on blue grass soil.*	13.75	7.09	9.89	24.07	43.43	1.77	8.2	11.5	27.9	50.3	2.1	Ky. Ex. Sta. Bul. 5, 1886, p. 14	1200
1201	Time of cutting unknown	8.05	7.28	13.81	23.16	44.68	3.02	7.9	14.9	25.2	48.7	3.3	Mo. Col. Farm Bul. 27, 1887, p. 6	1201
1202	Do	14.00	5.20	13.52	27.50	34.51	5.27	6.0	15.7	31.9	40.2	6.2	Ark. Ex. Sta. Rep., 1888, p. 132	1202
1203	Second crop	8.64	7.28	10.32	18.04	52.21	3.51	7.9	11.3	19.8	57.2	3.8	Colo. Ex. Sta. Bul. 8, 1889	1203
1204	Cut June 14; full bloom; 1 head out of 5 brown. *a*	31.27	6.46	10.82	18.25	27.28	5.92	9.5	15.8	26.5	39.6	8.6	Ill. Ex. Sta. Bul. 5, 1889	1204
1205	Do. *a*	28.67	6.03	11.23	18.30	30.51	5.26	8.5	15.8	25.4	42.9	7.4	do	1205
1206	Do. *a*	29.12	5.64	11.47	19.22	28.96	5.64	8.0	16.2	27.2	40.6	8.0	do	1206

1207	Do. *a*	29.77	5.79	11.06	17.87	30.57	4.94	8.3	15.8	25.5	43.4	7.0	do	1207
	Average *a h i j*	**29.71**	**6.00**	**11.17**	**18.37**	**29.29**	**5.46**	**8.5**	**15.9**	**26.1**	**41.7**	**7.8**		
1208	Cut June 21, 22; three quarters of the heads dead; few lower leaves brown. *a*	30.40	5.73	10.66	20.85	28.43	3.93	8.2	15.3	30.0	40.8	5.7	do	1208
1209	Do. *a*	22.31	6.16	12.24	21.14	33.25	4.90	7.9	15.8	27.2	42.8	6 3	do	1209
1210	Do. *a*	22.83	6.40	12.16	19.77	34.36	4.48	8.3	15.8	25.6	44.5	5.8	do	1210
1211	Do. *a*	25.86	5.83	11.67	20.46	30.30	5.90	7.9	15.8	27.6	40.8	7.9	do	1211
	Average *a h i j*	**25.35**	**6.04**	**11.68**	**20.61**	**31.58**	**4.74**	**8.1**	**15.6**	**27.6**	**42.3**	**6.4**		
1212	Time of cutting unknown	8.35	7.16	12.38	24.62	41.79	5.70	7.9	13.6	26.8	45.5	6.2	Ind. Ex. Sta. Bul. 24, 1889	1212
1213	Cut June 21; in bloom *c*	6.02	8.30	13.82	28.11	41.27	2.48	8.9	14.7	29.9	43.9	2.6	Mass. State Ex. Sta. Rep., 1889, p. 163	1213
	All analyses, common red clover, excluding Nos. 1195–1200. Maximum	31.27	8.33	20.75	35.65	52.21	5.92	9.5	23.3	38.6	57.2	8.6		
	Minimum	6.02	3.88	10.00	15.60	27.28	1.47	4.6	10.9	17.5	39.0	1.8		
	Average	**15.26**	**6.15**	**12.32**	**24.75**	**38.20**	**3.32**	**7.3**	**14.5**	**29.1**	**45.2**	**3.9**		
	Five analysee in bloom† Maximum	31.27	8.30	15.37	28.11	41.27	5.92	9.5	16.7	29.9	47 0	8.1		
	Minimum	6.02	5.64	10.82	17.87	27.28	2.48	7.1	14.6	25.1	39.6	2.6		
	Average	**20.78**	**6.59**	**12.38**	**21.85**	**33.92**	**4.48**	**8.3**	**15.6**	**27.5**	**43.0**	**5.6**		
	Mammoth red clover (*Trifolium medium*):													
1214	Cut June 30; about 1 head in 10 in bloom; others small and green. *a h i j*	23.72	5.71	10.34	23.88	31.02	5.33	7.5	13.6	31.2	40.7	7 0	Ill. Ex. Sta. Bul. 5, 1889	1214
1215	Do. *a h i j*	29.44	5.78	9.88	21.63	28.57	4.70	8.2	14.0	30.6	40.5	6 7	do	1215
1216	Do. *a h i j*	24.12	5.99	10.60	23.00	31.22	5.07	7.9	14.0	30.3	41.1	6.7	do	1216
1217	Do. *a h i j*	27.96	5.74	9.90	20.91	30.96	4.53	8.0	13 8	29.0	42.9	6.3	do	1217
	Average	**26.31**	**5.80**	**10.20**	**22.35**	**30.44**	**4.90**	**7.9**	**13.8**	**30.3**	**41.3**	**6.7**		
1218	Cut July 11; half the heads in full bloom; some turning brown; lodged. *a h i j*	26.70	5.20	9.62	25.08	28.86	4.56	7.1	13.1	34.2	39.4	6.2	do	1218
1219	Do. *a h i j*	24.08	4.96	9.96	27.24	28.64	5.12	6 5	13.1	35.9	37.7	6.8	do	1219
1220	Do. *a h i j*	26.60	4.45	8.99	25.06	31.60	3.30	6.1	12.3	34.1	43.0	4.5	do	1220
	Average	**25.79**	**4.88**	**9.52**	**25.78**	**29.71**	**4.32**	**6.6**	**12.8**	**34.8**	**40.0**	**5.8**		
1221	Cut July 23; three fourths to four fifths of the heads brown; seed ripe; lower leaves dead. *a h i j*	19.62	4.86	9.14	26.02	36.20	4.16	6.0	11.4	32.4	45.0	5.2	do	1221
1222	Do. *a h i j*	18.34	5.71	9.29	24.00	38.72	3.94	7.0	11.4	29.4	47.4	4.8	do	1222
1223	Do. *a h i j*	20.63	4.99	9.03	29.39	31.73	4.23	6.3	11.4	37.0	40.0	5.3	do	1223
	Average	**19.53**	**5.18**	**9.15**	**26.50**	**35.54**	**4.10**	**6.4**	**11.4**	**32.9**	**44.2**	**5.1**		

* Salted when stored.

† Nos. 1177, 1185, 1204, 1207, 1213.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF LEGUMES—continued.													
	Mammoth red clover (*Trifolium medium*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1224	Cut June 21; in bloom; fertilized *c*	17.53	8.65	12.12	27.79	31.99	1.92	10.5	14.7	33.7	38.8	2.3	Mass. State Ex. Sta. Rep., 1889, p. 164	1224
1225	Cut June 21; in bloom; unfertilized *c*	9.36	9.52	16.77	18.31	44.41	1.63	10.5	18.5	20.2	49.0	1.8	do	1225
1226	Cut July 13; in seed; unfertilized *c*	7.34	7.86	13.05	26.49	43.13	2.13	8.5	14.1	28.6	46.5	2.3	do	1226
	All analyses, mammoth red clover. Maximum	29.44	9.52	16.77	29.39	44.41	5.33	10.5	18.5	37.0	49.0	7.0		
	Minimum	7.34	4.45	8.99	18.31	28.57	1.63	6.0	11.4	20.2	37.7	1.8		
	Average	**21.18**	**6.11**	**10.67**	**24.52**	**33.63**	**3.89**	**7.3**	**13.5**	**31.3**	**43.0**	**4.9**		
	Five analyses in bloom.* Maximum	26.70	9.52	16.77	27.79	44.41	5.12	10.5	18.5	35.9	49.0	6.8		
	Minimum	9.36	4.45	8.99	18.31	28.64	1.63	6.1	12.3	20.2	37.3	1.8		
	Average	**20.85**	**6.56**	**11.49**	**24.69**	**33.11**	**3.30**	**8.2**	**14.6**	**31.1**	**41.9**	**4.2**		
	Alsike clover (*Trifolium hybridum*):													
1227	Cut July 13; in bloom	5.27	9.34	16.06	28.63	36.47	4.23	9.9	16.9	30.2	38.5	4.5	Me. Ex. Sta. Rep., 1885–'86, p. 51	1227
1228	Time of cutting unknown	7.46	6.44	11.44	29.52	43.53	1.64	6.9	12.4	32.0	47.0	1.7	N. J. Ex. Sta. Rep., 1886, p. 158	1228
1229	Cut Aug. 16; in bloom; fertilized	8.64	9.98	13.68	24.00	41.06	2.64	10.9	15.0	26.3	44.9	2.9	Mass. State Ex. Sta. Rep., 1887, p. 131	1229
1230	Cut Aug. 16; in bloom; unfertilized	8.30	12.24	15.88	19.66	40.93	2.99	13.4	17.3	21.4	44.6	3.3	do	1230
1231	Cut in the fall	13.90	6.36	10.51	24.60	41.47	3.15	7.4	12.2	28.6	48.2	3.6	Vt. Ex. Sta. Rep., 1887, p. 126	1231
1232	Cut in full bloom *a*	12.55	7.86	12.69	27.86	35.63	3.41	9.0	14.5	31.9	40.7	3.9	Me. Ex. Sta. Rep., 1888, p. 86	1232
1233	Time of cutting unknown	11.46	6.10	9.16	25.05	45.93	2.30	6.9	10.4	28.4	41.7	2.6	Ark. Ex. Sta. Rep., 1888, p. 131	1233
	All analyses Maximum	13.90	12.24	16.06	29.52	45.93	4.23	13.4	17.3	32.0	48.2	4.5		
	Minimum	5.27	6.10	9.16	19.66	35.63	1.64	6.9	10.4	21.4	38.5	1.7		
	Average	**9.66**	**8.33**	**12.77**	**25.62**	**40.72**	**2.90**	**9.3**	**14.2**	**28.4**	**44.9**	**3.2**		
	White clover (*Trifolium repens*):													
1234	Cut July 13; in bloom	8.68	7.05	20.00	20.26	38.21	5.80	7.7	21.9	22.1	42.0	6.3	Me. Ex. Sta. Rep., 1885–'86, p. 51	1234
1235	Time of cutting unknown	7.08	8.95	14.06	27.25	40.56	2.10	9.7	15.2	29.4	43.4	2.3	N. J. Ex. Sta. Rep., 1886, p. 158	1235
1236	In bloom for some time *a*	12.39	7.42	15.12	24.91	36.49	3.67	8.5	17.2	28.4	41.7	4.2	Me. Ex. Sta. Rep., 1888, p. 86	1236
1237	Cut in bloom; fertilized *c*	13.52	13.75	14.26	23.18	33.38	1.91	15.9	16.5	26.8	38.6	2.2	Mass. State Ex. Sta. Rep., 1889, p. 163	1237

1238	Cut in bloom; unfertilized *c*	13.10	8.60	15.30	20.85	40.50	1.65	9.9	17.6	24.0	46.6	1.9	do	1238
1239	Cut in seed; fertilized *c*	6.08	7.79	13.90	30.34	39.07	2.82	8.3	14.8	32.3	41.6	3.0	do	1239
1240	Cut Sept. 1	7.20	4.51	17.07	21.67	47.34	2.21	4.8	18.4	23.3	61.1	2.4	Ga. Ex. Sta. Bul. 7, 1890	1240
	All analyses: Maximum	13.52	13.75	20.00	30.34	47.34	5.80	15.9	21.9	32.3	51.1	6.3		
	All analyses: Minimum	6.08	4.51	13.90	20.26	33.38	1.65	4.8	14.8	22.1	38.6	1.9		
	All analyses: Average	**9.72**	**8.29**	**15.67**	**24.06**	**39.38**	**2.88**	**9.2**	**17.4**	**26.7**	**43.5**	**3.2**		
	Alfalfa, lucern (*Medicago sativa*):													
1241	First growth cut July 2; beginning to bloom	16.00	8.78	13.73	21.35	38.04	2.10	10.5	16.3	25.4	45.3	2.5	Mass. State Ex. Sta. Rep., 1885, p. 70	1241
1242	First cut *b*	7.55	8.61	18.56	26.22	36.66	2.40	9.3	20.1	28.3	39.7	2.6	N. J. Ex. Sta. Rep., 1886, p. 160	1242
1243	Second cut *b*	5.66	6.49	17.56	33.04	35.45	1.80	6.9	18.6	35.0	37.6	1.9	do	1243
1244	Third cut *b*	6.25	6.19	15.00	31.38	39.22	1.96	6.6	16.0	33.5	41.8	2.1	do	1244
1245	First cut Aug. 16; in bloom; fertilized	8.33	6.58	10.20	26.16	47.32	1.41	7.2	11.1	28.5	51.7	1.5	Mass. State Ex. Sta. Rep., 1887, p. 131	1245
1246	First cut Aug. 16; in bloom; unfertilized	8.41	7.17	11.87	25.52	45.16	1.87	7.8	13.0	27.9	49.3	2.0	do	1246
1247	Cut June 28; coming into bloom	10.09	7.89	16.87	27.12	36.11	2.01	8.8	18.8	30.1	40.1	2.2	Vt. Ex. Sta. Rep., 1887, p. 130	1247
1248	Cut July 7; seed in dough; from same field as last.	12.48	7.53	14.12	28.72	35.07	2.08	8.6	16.1	32.8	40.1	2.4	do	1248
1249	Time of cutting unknown	8.50	7.46	15.17	22.00	43.96	2.85	8.1	16.6	24.2	47.9	3.2	Colo. Ex. Sta. Bul. 8, 1889	1249
1250	Third crop; 26 days from previous cutting; no irrigation.	9.91	10.35	19.79	16.72	40.55	2.68	11.5	21.9	18.6	45.0	3.0	do	1250
1251	Cut for seed Sept. 25	8.77	7.23	11.20	22.32	46.64	3.84	7.9	12.3	24.5	51.1	4.2	do	1251
1252	Third crop; very coarse	6.62	8.47	11.59	24.59	46.57	2.25	9.1	12.2	26.3	50.0	2.4	do	1252
1253	Cut July 15; irrigated 1 week after first cutting; in bloom. *h*	9.31	10.29	10.55	14.00	53.64	2.30	11.2	11.6	15.4	59.3	2.5	do	1253
1254	Cut June 6; adobe land; no irrigation *a*	8.46	9.02	12.35	19.18	48.36	2.63	9.8	13.5	21.0	52.9	2.8	do	1254
1255	Cut July 25; irrigated June 1 and July 15 *a*	8.33	7.32	11.33	22.90	48.31	1.81	7.9	12.4	25.0	52.7	2.0	do	1255
1256	Cut July 25; irrigated May *a*	9.12	7.75	10.27	21.90	48.37	2.59	8.5	11.3	24.1	53.2	2.9	do	1256
1257	Second crop	9.75	7.87	11.64	19.92	48.47	2.35	8.8	12.9	22.2	53.4	2.7	do	1257
1258	In bloom; fertilized *c*	4.68	7.53	15.54	32.79	38.41	1.05	7.9	16.3	34.4	40.3	1.1	Mass. State Ex. Sta. Rep., 1889, p. 165	1258
1259	In bloom; unfertilized *c*	4.69	6.77	13.74	30.91	42.93	1.05	7.1	14.4	32.4	45.0	1.1	do	1259
1260	Time of cutting unknown	7.26	3.97	20.28	27.41	39.02	2.06	4.3	21.9	29.5	42.0	2.3	Ga. Ex. Sta. Bul. 7, 1890	1260
1261	White lucern	7.20	3.07	18.62	30.99	38.10	2.02	3.2	20.0	33.4	41.2	2.2	do	1261
	All analyses: Maximum	16.00	10.35	20.28	33.04	53.64	3.84	11.5	21.9	35.0	59.3	4.2		
	All analyses: Minimum	4.60	3.07	10.20	14.00	35.07	1.05	3.2	11.1	15.4	37.6	1.1		
	All analyses: Average	**8.44**	**7.44**	**14.28**	**25.01**	**42.68**	**2.15**	**8.1**	**15.6**	**27.3**	**46.6**	**2.4**		
1262	Sand lucern (*Medicago media*), cut in bloom	8.80	8.73	14.84	19.41	45.86	2.36	9.6	16.2	21.3	50.3	2.6	Mass. State Ex. Sta. Rep., 1885, p. 71	1262
	Serradella (*Ornithopus sativus*):													
1263	Cut Aug. 14; in bloom	7.20	5.45	16.56	22.62	45.97	2.20	5.9	17.8	24.4	49.5	2.4	Mass. State Ex. Sta. Rep., 1884, p. 96	1263
1264	Cut Sept. 3; fully matured	8.70	5.90	13.93	22.95	45.86	2.66	6.5	15.3	25.1	50.2	2.9	do	1264
1265	Cut July 12; in bloom	11.71	10.35	15.24	19.36	40.47	2.87	11.7	17.3	21.9	45.8	3.3	Vt. Ex. Sta. Rep., 1887, p. 127	1265
1266	Blue melilot (*Melilotus cœruleus*,) cut Aug. 8; past bloom *c*	8.22	13.64	12.09	24.94	39.68	1.52	14.9	13.1	27.2	43.2	1.6	Mass. State Ex. Sta. Rep., 1889, p. 181	1266
1267	Yellow lupine (*Lupinus luteus*), cut July 12; in bloom.	9.34	7.70	11.85	27.54	40.30	3.27	8.5	13.1	30.4	44.4	3.6	Vt. Ex. Sta. Rep., 1887, p. 128	1267

* Nos. 1218, 1219, 1220, 1224, 1226.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-fresh substance.					References to publications.	
		Water	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF LEGUMES—continued.													
	Vetch (*Vicia sativa*):	%	%	%	%	%	%	%	%	%	%	%		
1268	Cut Aug. 15; in bloom	8.35	7.30	14.45	28.12	39.67	2.11	8.0	15.7	30.7	43.3	2.3	Mass. State Ex. Sta. Rep., 1884 p. 94.	1268
1269	Cut Sept. 3; fully matured	9.45	7.70	13.06	27.21	40.15	2.43	8.5	14.4	30.1	44.3	2.7	Mass. State Ex. Sta. Rep., 1884, p. 95.	1269
1276	Winter vetch, cut July 19; in bloom	11.85	5.79	23.07	19.70	36.61	2.98	6.6	26.2	22.3	41.5	3.4	Vt. Ex. Sta. Rep., 1887, p. 127	1270
1271	Spring vetch, cut July 12; in bloom	11.08	7.09	15.99	26.12	37.31	2.41	8.0	18.0	29.4	41.9	2.7	do	1271
1272	Variety unknown	11.12	8.00	26.07	13.54	36.57	4.70	9.6	29.3	15.2	41.2	5.3	U. S. Dept. Agr. Rep., 1879, p. 121	1272
	Cowpea (*Dolichos*):													
1273	Variety unknown	16.22	10.20	19.81	23.66	34.98	1.13	11.3	22.0	26.3	39.1	1.3	N. J. Ex. Sta. Rep., 1882, p. 71	1273
1274	Black variety	13.38	6.02	13.56	17.96	46.40	2.68	7.0	15.6	20.8	53.5	3.1	N. J. Ex. Sta. Rep., 1883, p. 74	1274
1275	Whip-poor-will variety	13.99	9.04	14.50	18.51	41.57	2.39	10.5	16.8	21.4	48.5	2.8	do	1275
1276	Clay variety, cut Aug. 1; seeded down in latter part of May.	9.30	8.64	15.44	21.38	41.78	3.46	9.5	17.0	23.6	46.1	3.8	Mass. State Ex. Sta. Rep., 1884, p. 91.	1276
1277	Whip-poor-will variety; cut Aug. 1	9.65	9.45	15.36	20.26	41.89	3.51	10.5	17.6	22.3	46.3	3.9	Mass. Ex. Sta. Rep., 1884, p. 92	1277
1278	Cut Sept. 22; frosted	11.00	6.14	14.10	16.73	49.52	2.51	6.9	15.9	18.8	55.6	2.8	Vt. Ex. Sta. Rep., 1887, p. 126	1278
1279	Cut Aug. 20; in full bloom *a c*	10.11	6.68	16.05	16.53	47.00	3.63	7.4	17.9	18.4	52.3	4.0	S. C. Ex. Sta. Rep., 1888, p. 125	1279
1280	Second cutting; pods about ⅔ grown *a c*	11.33	7.02	17.67	16.42	44.85	2.91	7.9	19.9	18.5	50.6	3.1	S. C. Ex. Sta. Rep., 1888, p. 126	1280
1281	Variety unknown	7.60	3.18	20.25	26.01	39.36	3.69	3.5	22.0	28.1	42.4	4.6	Ga. Ex. Sta. Bul. 7, 1890	1281
	All analyses, excluding No. 1278. Maximum	13.99	10.20	20.25	26.01	49.52	3.69	11.3	22.6	28.1	55.6	4.6		
	Minimum	7.66	3.18	13.56	16.42	39.36	1.13	3.5	15.6	18.4	39.1	1.3		
	Average	**10.69**	**7.53**	**16.57**	**20.09**	**42.22**	**2.90**	**8.5**	**18.6**	**22.5**	**47.2**	**3.2**		
1282	Soja bean (*Soja hispida*) *c*	6.48	7.95	14.12	26.39	45.17	5.89	8.5	15.1	21.8	48.3	6.3	Mass. State Ex. Sta. Rep., 1889, p. 144	1282
1283	Cut Aug. 30 *c*	6.12	6.07	14.96	19.49	48.14	5.28	6.5	15.9	20.8	51.3	5.5	Mass. State Ex. Sta. Rep., 1889, p. 166	1283
1284	Japan clover (*Lespedeza striata*), grown in Alabama.	9.13	4.11	13.70	21.55	47.52	3.99	4.5	15.0	23.7	52.4	4.4	U. S. Dept. Agr. Rep., 1879, p. 121	1284
1285	Japan clover, grown in Arkansas	12.82	12.82	13.84	26.45	30.63	3.44	14.6	15.8	30.4	35.3	3.9	Ark. Ex. Sta. Rep., 1888, p. 131	1285
1286	Beggar lice (*Desmodium molle*), grown in South Carolina.	10.45	6.95	16.98	22.69	40.44	2.49	7.6	19.0	25.2	45.4	2.8	U. S. Dept. Agr. Rep., 1879, p. 121	1286
	Beach pea (*Lathyrus maritimus*):													
1287	Cut June 24, from Nantasket Beach, Cohasset, Massachusetts.	7.88	6.99	23.25	29.35	27.58	4.95	7.6	25.2	31.8	30.1	5.3	Bussey Inst. Bul. 5, 1875, p. 351	1287
1288	Cut July 16; from Bar Harbor, Mount Desert, Maine.	7.18	6.54	14.66	30.02	36.64	4.96	7.0	15.8	32.4	39.5	5.3	do	1288

1289	Cut Aug. 28; from Nonamesett Island, Massachusetts.	7.79	8.60	18.19	26.99	35.39	3.04	9.3	19.7	29.3	38.4	3.3	do	1289
	HAY OF SEDGES.													
	Bog sedge (*Carex stricta*), grown on boge:													
1290	Cut June 11, 1873; going to seed; much seed lost.	7.46	6.52	10.41	33.60	39.80	2.21	7.0	11.2	36.3	43.1	2.4	Bussey Inst. Bul. 1875, p. 345	1290
1291	Cut June 16, 1873; fresh grass contained 65.97 per cent water.	7.33	6.17	9.38	33.91	41.08	2.13	6.7	10.1	36.6	44.3	2.3	do	1291
1292	Cut Aug., 1874; no seed or flowers; many stalks and leaves dead.	7.96	5.65	6.31	33.55	43.53	3.00	6.1	6.8	36.5	47.3	3.3	do	1292
1293	Cut 1874	8.38	5.43	7.44	33.30	43.53	1.92	5.9	8.1	36.3	47.6	2.1	do	1293
1294	Cut Dec. 26, 1874; dead and weather-beaten.	9.32	4.42	4.63	39.99	40.96	0.74	4.9	5.1	44.1	45.0	0.9	do	1294
	Snipsnap, two-tail (*Eleocharis rostellata*); grown on a salt marsh:													
1295	Cut June 22, soon after bloom	8.67	9.47	9.32	24.61	45.51	2.42	10.4	10.2	26.9	49.8	2.7	Conn. State Ex. Sta. Rep., 1889, p. 245	1295
1296	Cut Aug. 12; seed hard	8.09	10.72	8.25	24.25	46.29	2.40	11.7	8.9	26.4	50.4	2.6	do	1296
1297	Woolly sedge grass (*Scirpus eriophorum*); grown in Indian Territory.	4.88	6.52	4.41	28.72	52.62	2.85	6.9	4.7	30.2	55.2	3.0	U. S. Dept. Agr. Rep., 1879, p. 123	1297
1298	Sea club rush (*Scirpus maritimus*); grown on a salt marsh; cut June 22, 1889, soon after bloom.	11.24	7.98	9.19	24.75	43.99	2.85	9.0	10.4	27.8	49.6	3.2	Conn. State Ex. Sta. Rep., 1889, p. 244	1298
1299	Larger three-square (*Scirpus olneyi*); grown on a salt marsh; cut July 28, 1889, soon after bloom,	9.53	8.24	10.06	25.14	45.25	1.78	9.1	11.1	27.8	50.0	2.0	Conn. State Ex. Sta. Rep., 1889, p. 245	1299
	Three-square (*Scirpus pungens*); grown on a salt marsh:													
1300	Cut June 22, soon after bloom } Same locality.	7.07	8.59	8.31	25.10	47.41	2.62	9.3	9.0	27.3	51.5	2.9	Conn. State Ex. Sta. Rep., 1889, p. 244	1300
1301	Cut Aug. 12, seed dropping } Same locality.	7.89	8.56	6.50	23.76	56.49	2.80	9.3	7.1	25.8	54.8	3.0	do	1301
1302	Cut July 13; seed hard	8.00	8.22	7.44	30.22	43.97	2.15	8.9	8.1	32.9	47.8	2.3	do	1302
1303	Cut Aug. 5; seed gone	8.55	7.89	7.37	23.68	49.95	2.56	8.6	8.1	25.9	54.6	2.8	do	1303
	HAY OF RUSHES.													
1304	Soft rush (*Juncus effusus*); cut Aug., 1875	6.88	2.63	6.75	41.48	42.26		2.8	7.3	44.5	45.4		Bussey Inst. Bul. 1875, p. 351	1304
	Black grass (*Juncus gerardi*):													
1305	Upper parts of stalks, with many seed vessels, but no seeds.	7.17	4.90	7.39	35.90	42.55	2.09	5.3	8.0	38.6	45.8	2.3	Bussey Inst. Bul. 1875, p. 342	1305
1306	Cut 1874; excellent sample; many seeds upon the stalks.	10.25	5.48	6.18	30.43	45.15	2.51	6.1	6.9	33.9	50.3	2.8	do	1306
1307	Time of cutting unknown	9.16	6.84	7.56	22.10	51.44	2.96	7.5	8.3	24.3	56.6	3.3	N. J. Ex. Sta. Rep., 1882, p. 70	1307
1308	Do	11.02	6.92	7.06	29.42	43.14	2.38	8.0	8.1	22.9	47.3	2.7	do	1308
1309	Do	8.94	8.28	6.56	24.63	49.31	2.28	9.1	7.2	27.0	54.2	2.5	do	1309
1310	Cut July 24, when beginning to look red, *e. g.*, approaching maturity.	13.15	5.64	6.21	20.55	53.40	1.05	6.5	7.1	23.7	61.5	1.2	Mass. State Ex. Sta. Rep., 1883, p. 73	1310
1311	Cut June 24, before bloom	10.22	7.75	8.43	22.25	49.99	1.36	8.6	9.4	24.8	55.7	1.5	Mass. State Ex. Sta. Rep., 1883, p. 72	1311
1312	Time of cutting unknown	8.20	5.60	5.44	26.55	52.03	2.18	6.1	5.9	28.9	56.7	2.4	N. J. Ex. Sta. Rep., 1886, p. 164	1312

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF RUSHES—continued.													
	Black grass *b* (*Juncus gerardi*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1313	Cut July 1, 1888*	6.74	6.61	8.62	27.74	48.14	2.15	7.1	9.2	29.8	51.6	2.3	Conn. State Ex. Sta. Rep., 1889, p. 243	1313
1314	Cut Sept. 1, 1888*	6.74	9.18	6.56	26.16	49.13	2.23	9.8	7.0	28.1	52.7	2.4	do	1314
1315	Cut June 22, 1889; in bloom*	8.15	7.96	9.20	25.37	46.61	2.71	8.7	10.0	27.6	50.7	3.0	do	1315
1316	Cut June 22, 1889; seed in milk*	10.04	5.80	7.44	27.40	46.93	2.39	6.4	8.3	30.4	52.2	2.7	do	1316
1317	Cut Aug. 12, 1889; seed gone*	7.35	4.97	5.31	28.20	52.09	2.08	5.4	5.7	30.5	56.2	2.2	do	1317
1318	Cut June 30, 1889; seed in milk†	10.58	8.71	8.12	25.06	45.21	2.32	9.7	9.1	28.0	50.6	2.6	do	1318
1319	Cut Sept. 27, 1889; aftermath†	8.99	9.22	7.50	23.43	47.78	3.08	10.1	8.2	25.8	52.5	3.4	do	1319
1320	Cut July 20, 1889; seed almost ripe‡	9.94	7.93	7.75	24.10	47.38	2.90	8.8	8.6	26.7	52.7	3.2	do	1320
1321	Cut Aug. 7, 1889; seed very ripe‡	9.51	7.01	7.37	24.41	48.84	2.86	7.7	8.2	27.0	54.0	3.1	do	1321
1322	Cut Sept. 15, 1889; seed gone‡	11.49	5.37	6.69	26.36	47.23	2.86	6.0	7.6	29.8	53.4	3.2	do	1322
1323	Cut Sept. 15, 1889; second growth‡	11.63	8.78	11.62	20.44	44.32	3.21	9.9	13.1	23.1	50.2	3.7	do	1323
1324	Time of cutting unknown	9.60	6.09	8.00	27.21	46.83	2.27	6.8	8.8	30.1	51.8	2.5	do	1324
	All analyses: Maximum	13.15	9.22	11.62	35.90	53.40	3.21	10.1	13.1	38.6	61.5	3.7		
	All analyses: Minimum	6.74	4.90	5.31	20.44	42.55	1.05	5.3	5.7	22.9	45.8	1.2		
	All analyses: Average	**9.45**	**6.95**	**7.45**	**25.88**	**47.88**	**2.39**	**7.6**	**8.2**	**28.5**	**53.0**	**2.7**		
	HAY OF MISCELLANEOUS PLANTS.													
1325	Blue weed, blue thistle (*Echium vulgare*), grown in West Virginia.	7.92	6.25	5.78	20.42	57.16	2.47	6.7	6.3	22.1	62.2	2.7	U. S. Dept. Agr. Rep., 1879, p. 121	1325
1326	Sulla (*Hedysarum coronaria*) *c*	10.46	7.88	15.22	11.10	52.56	2.78	8.8	17.0	12.4	58.7	3.1	Mass. State Ex. Sta. Rep., 1889, p. 179	1326
	White weed, oxeye daisy (*Chrysanthemum Leucanthemum*):													
1327	Cut in full bloom *a*	9.63	6.85	8.44	29.00	41.72	4.36	7.6	9.3	32.1	46.2	4.8	Me. Ex. Sta. Bul. 26, 1888, p. 6	1327
1328	Cut June 30; in full bloom	10.87	6.44	7.90	31.00	42.27	2.42	7.2	7.9	34.8	47.4	2.7	Bussey Inst. Bul. 1875, p. 351	1328
	Average	**10.25**	**6.64**	**7.72**	**30.00**	**42.00**	**3.39**	**7.3**	**8.5**	**33.5**	**46.9**	**3.8**		
	Hairy lotus (*Lotus villosus*):													
1329	Second year's growth *c*	10.68	7.32	12.06	21.88	45.38	2.68	8.2	13.5	24.5	50.8	3.0	Mass. State Ex. Sta. Rep., 1889, p. 178	1329
1330	First year's growth *c*	12.36	7.27	14.11	13.23	50.66	2.37	8.3	16.1	15.1	57.8	2.7	Mass. State Ex. Sta. Rep., 1889, p. 179	1330
1331	Flowering fern (*Osmunda regalis*)	8.23	6.73	7.38	25.59	49.10	2.97	7.2	8.1	27.9	53.5	3.3	Bussey Inst. Bul., 1875, p. 351	1331

1332	Do. *c*	14.56	6.09	10.24	21.60	45.10	2.41	7.2	11.9	25.2	52.9	2.8	Conn. State Ex. Sta. Rep., 1886, p.112	1332
1333	Ribwort plantain (*Plantago lanceolata*), grown in New Hampshire.	7.85	6.90	9.80	20.24	51.10	4.11	7.4	10.7	21.9	55.5	4.5	U. S. Dept. Agr. Rep., 1879, p. 121	1333
	Buttercup (*Ranunculus acris*):													
1334	Cut in full bloom *a*	10.43	6.01	9.06	30.44	40.71	3.34	6.7	10.1	34.0	45.5	3.7	Me. Ex. Sta. Bul. 26, 1888	1334
1335	Cut June 16; passing out of bloom	8.24	5.21	10.66	30.70	41.55	3.63	5.7	11.6	33.5	45.3	3.9	Bussey Inst. Bul., 1875, p. 351	1335
	Average	**9.33**	**5.61**	**9.86**	**30.57**	**41.13**	**3.50**	**6.2**	**10.9**	**33.7**	**45.3**	**3.9**		
1336	Mexican clover (*Richardsonia scabra*), grown in Alabama.	6.34	7.82	5.60	27.79	49.38	2.89	8.3	5.9	29.8	53.0	3.0	U. S. Dept. Agr. Rep., 1879, p. 121	1336
	Goose grass (*Triglochin maritimum*), grown on a salt marsh:													
1337	Cut June 22; leaves only	7.16	10.98	11.37	25.13	42.01	3.35	11.8	12.3	27.1	45.2	3.6	Conn. State Ex. Sta. Rep., 1889, p. 244	1337
1338	Cut July 13; stalks with green seed pods	9.02	6.29	8.12	36.31	37.57	2.69	6.9	8.9	39.9	41.3	3.0	do	1338
1339	Cat's-tail (*Typha latifolia*), grown on a salt marsh; cut July 13; leaves only.	10.77	5.78	7.00	33.68	39.75	3.02	6.4	7.9	37.8	44.6	3.3	Conn. State Ex. Sta. Rep., 1889, p. 245	1339
	HAY OF MIXED MEADOW GRASSES.													
	Mostly timothy (*Phleum pratense*):													
1340	Cut in 1882	13.88	4.88	5.38	33.33	40.32	2.21	5.7	6.3	38.7	46.7	2.6	N. Y. State Ex. Sta. Rep., 1883, p. 150	1340
1341	Cut in 1883	15.22	4.94	5.14	31.28	41.36	2.06	5.8	6.1	36.9	48.8	2.4	N. Y. State Ex. Sta. Rep., 1884, p. 330	1341
1342	Baled Western hay	6.84	3.82	8.12	31.70	44.62	4.90	4.1	8.7	34.1	47.8	5.3	Ga. Ex. Sta. Bul. 7, 1890	1342
1343	Do	7.70	3.72	8.63	35.61	42.65	1.69	4.0	9.4	38.5	46.3	1.8	do	1343
	Mostly timothy (*Phleum pratense*), and redtop (*Agrostis vulgaris*):													
1344	Cut June 17; grown on dry upland; mown 3 years. *a k*	14.30	5.57	7.85	24.72	45.08	2.48	6.5	9.2	28.8	52.6	2.9	Conn. State Ex. Sta. Rep., 1879, p. 79	1344
1345	Cut June 18; grown on moderately dry irrigated intervale; mown 4 years. *a k*	14.30	6.86	8.97	28.45	39.20	2.22	8.0	10.5	33.2	45.7	2.6	do	1345
1346	Cut July 20; second cutting from new ground. *a k*	14.30	4.81	6.02	26.54	46.88	1.45	5.6	7.0	31.0	54.7	1.7	do	1346
1347	Cut last week in July; grown on moist upland. *a k*	14.30	4.90	7.50	26.30	45.30	1.70	5.7	8.8	30.7	52.8	2.0	do	1347
1348	Cut July 1; second cutting after seeding	13.12	4.11	6.91	28.11	45.73	2.02	4.7	8.0	32.3	52.7	2.3	Conn. State Ex. Sta. Rep., 1880. p. 83	1348
1349	Time of cutting unknown	12.00	3.50	6.25	30.36	45.84	2.05	4.0	7.1	34.5	52.1	2.3	Me. Ex. Sta. Rep., 1885–'86, p. 51	1349
1350	Do	18.90	4.11	4.97	25.41	44.22	2.39	5.1	6.1	31.3	54.5	3.0	Conn. State Ex. Sta. Rep., 1886, p.113	1350
1351	Seed ripe; grown on black alluvial soil	10.32	4.51	6.32	33.15	44.08	1.62	5.0	7.1	37.0	49.1	1.8	Ky. Ex. Sta. Bul. 5, 1886, p. 19	1351
1352	Seed nearly ripe	11.15	5.05	4.67	34.84	41.95	2.34	5.7	5.3	39.2	47.2	2.6	do	1352
1353	Redtop in full bloom; timothy riper	11.57	4.78	5.21	38.41	38.53	1.50	5.4	5.9	43.4	43.6	1.7	Ky. Ex. Sta. Bul. 5, 1886. p. 20	1353
1354	Mostly timothy (*Phleum pratense*), and blue grass (*Poa pratensis*).	14.30	4.70	7.00	26.90	45.40	1.70	5.5	8.2	31.3	53.0	2.0	Kans. State Col. Rep., 1884, p. 5	1354
1355	Mostly timothy (*Phleum pratense*), and orchard grass (*Dactylis glomerata*); grown on a river bottom.	8.22	5.41	7.50	33.60	41.97	3.30	5.9	8.1	36.6	45.7	3.7	Ga. Ex. Sta. Bul. 7, 1890	1355
1356	Mostly blue grass (*Poa pratensis*), and redtop (*Agrostis vulgaris*).	20.25	4.68	9.21	22.42	40.58	2.36	5.9	11.5	28.6	51.1	2.9	Conn. State Ex. Sta. Rep., 1887, p.100	1356

* Grown at Saybrook, Connecticut. † Grown at New Haven, Connecticut, Mill River marsh. ‡ Grown at New Haven, Connecticut, Quinnipiac marsh.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	HAY OF MIXED MEADOW GRASSES—continued.													
	Unclassified:	%	%	%	%	%	%	%	%	%	%	%		
1357	Cut first week in July; grown on old meadow; in grass 10 to 15 years. *a k*	14.30	4.56	6.50	25.89	47.33	1.43	5.3	7.6	30.2	55.2	1.7	Conn. State Ex. Sta. Rep., 1879, p. 79.	1357
1358	Cut fourth week in June; grown on old meadow. *a k*	14.30	4.23	7.02	27.82	45.00	1.63	4.9	8.2	32.5	52.5	1.9	do	1358
1359	Cut in 1884	18.00	4.54	5.74	32.19	36.88	2.65	5.5	7.0	39.3	45.0	3.2	N. Y. State Ex. Sta. Rep., 1885, p. 303.	1359
1360	Cut in 1884; many daisies	16.85	4.66	4.94	35.89	35.58	2.08	5.6	5.9	43.2	42.8	2.5	do	1360
1361	Cut in 1885	12.97	5.22	7.02	34.35	38.17	2.27	6.0	8.1	39.5	43.8	2.6	do	1361
1362	Time of cutting unknown	14.77	4.85	7.88	35.38	34.41	2.71	5.7	9.2	41.5	40.4	3.2	do	1362
1363	Do. *a*	15.41	5.26	7.56	29.91	39.02	2.81	6.2	8.9	35.4	46.1	3.4	N. Y. State Ex. Sta. Rep., 1888. p. 237.	1363
1364	Do. *a*	14.95	4.97	6.38	27.55	43.65	2.50	5.8	7.5	32.5	51.3	2.9	N. Y. State Ex. Sta. Rep., 1888, p. 238.	1364
	HAY OF MIXED GRASSES AND LEGUMES.													
1365	Timothy (*Phleum pratense*) and red clover (*Trifolium pratense*).	11.37	4.81	6.38	29.53	45.19	2.72	5.4	7.2	33.2	51.2	3.0	N. J. Ex. Sta. Rep., 1880, p. 46	1365
1366	Do	8.20	3.90	5.50	30.80	48.90	2.70	4.2	6.0	33.6	53.3	2.9	Agr. of Me., 1882, p. 300	1366
	Timothy (*Phleum pratense*) and Alsike clover (*Trifolium hybridum*):													
1367	Cut when partly out of bloom	11.10	6.27	10.06	30.36	39.24	2.97	7.1	11.3	34.1	44.2	3.3	Me. Ex. Sta. Rep., 1886-'87. p. 68	1367
1368	Do	10.18	6.36	10.00	30.15	40.36	2.95	7.1	11.1	33.6	44.9	3.3	do	1368
	Mixed grasses and clovers:													
1369	Seeded with blue grass, timothy, redtop and white clover, and mown 3 years; from dry upland; cut May 30. *a k*	14.30	5.30	14.42	19.66	43.23	3.09	6.2	16.8	23.0	50.4	3.6	Conn. State Ex. Sta. Rep., 1879, p. 79.	1369
1370	Seeded with red clover; from dry upland; cut June 5. *a k*	14.30	6.49	11.62	23.06	42.07	2.46	7.6	13.6	26.9	49.0	2.9	do	1370
1371	Much blue grass and timothy; considerable red and white clover; from dry upland; plowed 40 years; cut first week in July. *a k*	14.30	5.10	10.60	24.90	42.40	2.70	6.0	12.4	29.1	49.3	3.2	do	1371
1372	Yellow clover and timothy, with some redtop and wire grass (*Poa compressa*); cut July 1. *a k*	14.30	4.74	9.06	28.19	42.21	1.50	5.5	10.6	32.9	49.2	1.8	do	1372

1373	Chiefly timothy and redtop; some red clover and white weed (*Chrysanthemum Leucanthemum*); cut Aug. 1. *a k*	14.30	5.10	9.00	24.90	44.90	1.80	6.0	10.5	29.1	52.3	2.1	.....do	1373
1374	Timothy, clover, redtop, and bushes, baled.	15.95	3.93	6.20	26.60	45.13	2.19	4.6	7.4	31.6	53.8	2.6	Conn. State Ex. Sta. Rep., 1886, p. 113	1374
1375	Coarse in quality	15.11	3.17	6.44	29.77	43.73	1.78	3.8	7.5	35.1	51.5	2.1	Conn. State Ex. Sta. Rep., 1887, p. 100	1375
1376	Rowen of mixed grasses and clovers	14.53	6.30	11.80	28.22	35.84	3.31	7.4	13.8	33.0	41.9	3.9	N. Y. State Ex. Sta. Rep., 1884, p. 330	1376
1377	Rowen of mixed grasses and clovers; not as much clover as preceding.	14.13	6.16	10.36	29.38	36.88	3.09	7.2	12.1	34.2	42.9	3.6	.....do	1377
1378	Same as No. 1376, but exposed to weather 1 month; average sample. *k*	14.53	4.15	10.42	35.14	33.28	2.48	4.8	12.2	41.1	39.0	2.9	N. Y. State Ex. Sta. Rep., 1885, p. 303	1378
1379	Same as No. 1376, but exposed to weather 1 month; poorest sample. *k*	14.53	4.04	11.73	34.79	31.79	2.52	5.4	13.9	40.7	37.0	3.0	.....do	1379
1380	Rowen, contained much clover. *c*	8.84	9.57	12.03	26.86	39.92	2.78	10.5	13.2	29.5	43.7	3.1	Mass. State Ex. Sta. Rep., 1887, p. 95	1380
1381	Vetch (*Vicia sativa*) and oats (*Avena sativa*)	9.75	7.11	15.50	17.20	46.39	4.05	7.9	17.2	19.0	51.4	4.5	Mass. State Ex. Sta. Rep., 1884, p. 93	1381
	UPLAND HAY.													
	Upland hay:													
1382	Time of cutting unknown	11.35	5.68	6.79	27.22	46.93	2.03	6.4	7.7	30.7	52.9	2.3	Mass. State Ex. Sta. Rep., 1885, p. 98	1382
1383	Do	10.60	6.78	8.34	24.34	47.46	2.48	7.6	9.3	27.2	53.1	2.8	Mass. State Ex. Sta. Rep., 1885, p. 99	1383
1384	Do	16.04	3.79	4.83	26.28	46.88	2.18	4.5	5.8	31.3	55.8	2.6	N. Y. State Ex. Sta. Rep., 1886, p. 365	1384
1385	Do	19.00	4.49	6.52	23.72	44.92	1.35	5.5	8.0	29.2	55.6	1.7	Wis. Ex. Sta. Rep., 1886, p. 99	1385
1386	Do	6.48	2.08	8.23	35.85	44.30	3.06	2.2	8.8	38.3	47.4	3.3	Vt. Ex. Sta. Rep., 1887, p. 138	1386
1387	Do*	13.89	5.52	9.84	27.40	41.86	2.49	6.4	11.4	31.7	47.6	2.9	Ark. Ex. Sta. Rep., 1888, p. 132	1387
1388	Do	8.06	6.16	9.29	31.10	43.56	1.83	6.7	10.1	33.8	47.4	2.0	Mass. State Ex. Sta. Rep., 1889, p. 32	1388
1389	Do	11.84	6.86	6.06	35.75	37.91	1.58	7.8	6.9	40.6	42.9	1.8	Miss. Ex. Sta. Bul. 8, 1889	1389
1390	Cut July 10; early-cut hay	12.10	3.59	7.19	25.70	49.14	2.28	4.1	8.2	29.2	55.9	2.6	N. H. Ex. Sta. Bul. 8, 1889	1390
1391	Cut July 31; late-cut hay	8.63	4.34	7.18	26.56	50.83	2.56	4.7	7.8	29.1	55.6	2.8	.....do	1391
1392	Rowen, sun-dried; analysis No. 711 is same rowen after being in silo 11 months.	19.71	7.22	11.80	23.03	33.66	3.98	9.0	14.7	29.4	41.9	5.0	Mass. State Ex. Sta. Rep., 1886, p. 66	1392
1393	Rowen	10.95	5.79	12.64	28.04	38.13	4.45	6.5	14.2	31.5	42.8	5.0	Mass. Ex. Sta. Rep., 1889, p. 35	1393
	SWAMP HAY.													
	Swamp hay:													
1394	Time of cutting unknown	14.30	3.30	7.80	31.60	39.90	3.10	3.9	9.1	36.9	46.5	3.6	Conn. Bd. Agr Rep., 1872, p. 422	1394
1395	Chiefly *Carex stricta*, *C. stellulata*, var. *scirpoides*, *Eleocharis tenuis*. *k*	14.30	5.40	6.70	26.20	46.10	1.30	6.3	7.8	30.6	53.8	1.5	Conn. State Ex. Sta. Rep., 1879, p. 80	1395
1396	Cut Aug. 15, 1877 *k*	14.30	8.56	7.27	23.22	44.49	2.16	10.0	8.5	27.1	51.9	2.5	.....do	1396
1397	Cut Aug. 7 to 14, 1877 *k*	7.83	12.11	8.81	23.58	45.67	2.00	13.1	9.5	25.6	49.6	2.2	N. J. Ex. Sta. Rep., 1886, p. 164	1397
1398	Bog hay *b*	8.33	4.54	6.51	26.66	51.67	2.29	4.9	7.1	29.1	56.4	2.5	.....do	1398
1399	From a cranberry bog *b*	17.92	9.63	5.03	19.37	47.24	0.81	11.8	6.1	23.6	57.5	1.0	S. C. Ex. Sta. Rep., 1888, p. 134	1399
1400	Marsh hay *a c*	7.86	4.20	7.90	27.55	49.97	3.60	4.6	7.6	29.9	54.0	3.9	Mich. Ex. Sta. Bul. 49, 1889	1400
1401	Do	8.01	6.16	8.74	32.75	42.60	1.74	6.7	9.5	35.6	46.3	1.9	Mass. State Ex. Sta. Rep., 1889, p. 142	1401
	Low meadow hay													
	SALT MARSH HAY.													
	Salt marsh hay:													
1402	Cut 1872; contained spike grass (*Brizopyrum spicatum*), rush salt grass (*Spartina juncea*) and spear grass (*Glyceria maritima*).	7.93	6.29	7.09	31.40	44.39	2.90	6.8	7.7	34.1	48.3	3.1	Bussey Inst. Bul., 1874–'76, p. 341	1402

* Adds 101 (fresh or air-dry material).

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	SALT MARSH HAY—continued.													
	Salt marsh hay—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1403	Cut 1874; mostly spike grass and black grass (*Juncus gerardi*).	8.91	7.79	7.53	32.90	39.73	3.14	8.5	8.3	36.1	43.7	3.4	Bussey Inst. Bul., 1874–76, p. 341	1403
1404	Cut 1874; mostly spike grass and sea spear grass.	7.84	7.10	7.79	33.84	40.66	2.77	7.5	8.2	36.7	44.6	3.0	do	1404
1405	Cut 1874; mostly rush salt grass with a little spike grass.	8.70	7.51	4.88	28.71	48.52	1.68	8.1	5.4	31.5	53.1	1.9	do	1405
1406	Cut 1874; almost entirely rush salt grass (*Spartina juncea*).	8.61	5.97	4.38	37.91	41.30	1.83	6.6	4.8	41.5	45.1	2.0	do	1406
1407	Cut 1872; no seed or flowers; almost entirely salt marsh grass (*Spartina stricta*, var *alterniflora*).	11.70	9.84	4.33	30.54	41.30	2.29	11.2	4.8	34.6	46.8	2.6	Bussey Inst. Bul., 1874–76, p. 342	1407
1408	Cut 1874, similar to preceding	17.47	9.56	5.55	30.01	35.15	2.26	11.6	6.8	36.3	42.5	2.8	do	1408
1409	Cut 1874; considerable sand adhering	18.61	11.81	5.38	27.64	34.07	2.49	14.5	6.6	34.9	41.9	3.0	do	1409
	Particulars unknown	8.00	5.39	4.31	27.00	53.67	1.63	5.9	4.7	29.4	58.3	1.7	N. J. Ex. Sta. Rep., 1882, p. 70	
1410	Do. *b*	8.16	7.14	5.13	25.08	52.38	2.11	7.8	5.6	27.3	57.0	2.3	N. J. Ex. Sta. Rep., 1886, p. 164	1410
1411	Do. *b*	8.06	5.93	4.00	25.27	54.32	2.42	6.4	4.4	27.5	59.1	2.6	do	1411
1412	Creek sedge *b*	49.01	5.44	1.20	14.41	29.32	0.62	10.7	2.3	28.3	57.6	1.1	do	1412
1413	Do. *b*	34.60	7.77	2.70	17.88	35.52	1.53	12.0	4.1	27.3	54.3	2.3	do	1413
1414														1414
	STRAW.													
	Wheat straw:													
1415	Particulars unknown	6.50	6.96	4.98	38.08	41.99	1.49	7.4	5.3	40.7	45.0	1.6	Mass. State Ex. Sta. Rep., 1884, p. 108	1415
1416	Do	17.86	4.16	2.98	42.74	31.04	1.22	5.1	3.6	52.1	37.7	1.5	N. Y. State Ex. Sta. Rep., 1886, p. 365	1416
1417	Do. *b*	6.78	3.33	3.00	36.70	49.34	0.84	3.6	3.2	39.4	52.9	0.9	N. J. Ex. Sta. Rep., 1886, p. 162	1417
1418	Do. *b*	6.84	4.12	3.19	37.62	47.42	0.81	4.4	3.4	40.4	50.9	0.9	do	1418
1419	Do. *b*	7.62	3.03	3.63	34.30	49.59	1.82	3.2	3.9	37.1	53.9	1.9	do	1419
1420	Do. *b*	7.97	3.34	2.94	34.51	50.56	1.58	3.6	3.2	37.1	54.4	1.7	do	1420
1421	Do	14.10	4.30	3.22	42.50	34.48	1.38	5.0	3.7	49.5	40.2	1.6	Ark. Ex. Sta. Rep., 1888, p. 132	1421
	Maximum	17.86	6.96	4.98	42.74	50.56	1.82	7.4	5.3	52.1	54.4	1.9		
	Minimum	6.50	3.03	2.94	34.30	31.04	0.81	3.2	3.2	37.1	37.7	0.9		
	Average	**9.55**	**4.18**	**3.42**	**38.06**	**43.49**	**1.30**	**4.6**	**3.8**	**42.1**	**48.1**	**1.4**		

	Rye straw:													
1422	Raised on heavy loam *k*	12.50	8.03	6.89	34.20	35.70	2.68	6.2	7.9	39.1	40.8	3.0	Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 37.	1422
1423	Particulars unknown	9.73	2.75	2.19	43.29	41.04	1.00	3.1	2.4	47.9	45.5	1.1	Conn. State Ex. Sta. Rep., 1884, p. 109.	1423
1424	Do. *b*	6.30	3.60	2.75	41.52	44.54	1.29	3.9	3.0	44.3	47.4	1.4	N. J. Ex. Sta. Rep., 1886, p. 162	1424
1425	Do. *b*	6.51	3.12	3.63	32.70	52.88	1.16	3.4	3.9	35.9	55.5	1.3	do	1425
1426	Do. *b*	7.15	3.31	3.19	38.32	46.88	1.15	3.6	3.5	41.4	50.2	1.3	do	1426
1427	Do. *b*	6.32	2.93	3.19	36.73	49.25	1.58	3.2	3.5	39.2	52.5	1.6	do	1427
1428	Do. *b*	6.80	3.14	2.88	39.46	46.57	1.15	3.4	3.2	42.3	49.9	1.2	do	1428
1429	Do. *b*	6.78	3.37	3.00	40.58	45.07	1.20	3.7	3.3	43.5	48.2	1.3	do	1429
	All analyses, excluding No. 1422. Maximum	9.73	3.60	3.63	43.29	52.88	1.58	3.9	3.9	47.9	55.5	1.6		
	Minimum	6.30	2.75	2.19	32.70	41.04	1.00	3.1	2.4	35.9	45.5	1.1		
	Average	**7.08**	**3.17**	**2.98**	**38.94**	**46.61**	**1.22**	**3.4**	**3.2**	**41.9**	**50.2**	**1.3**		
	Oat straw:													
1430	From oats No. 2 *k*	12.50	1.81	2.30	55.96	26.42	1.01	2.1	2.6	69.0	30.1	1.2	Conn. State (Middletown) Ex. Sta. Rep., 1877–'78, p. 37.	1430
1431	Particulars unknown	6.53	5.77	5.08	35.21	44.26	3.15	6.2	5.4	37.6	47.4	3.4	U. S. Dept. Ag. Rep., 1881–'82, p. 553	1431
1432	Do	11.29	6.57	2.66	37.19	40.22	2.07	7.4	3.0	41.9	45.3	2.4	N. Y. Cornell Ex. Sta. Rep., 1882–'83, p. 41.	1432
1433	Do	8.15	6.65	4.00	45.09	33.54	2.57	7.3	4.4	49.1	36.4	2.8	Ohio Ex. Sta. Rep., 1885, p. 235	1433
1434	From white oats *b*	11.42	4.76	6.88	31.82	42.39	2.73	5.4	7.7	35.9	48.0	3.0	N. J. Ex. Sta. Rep., 1886, p. 162	1434
1435	From barley oats *b*	7.41	5.28	3.19	36.66	45.55	1.91	5.7	3.5	39.6	49.1	2.1	do	1435
1436	Particulars unknown *b*	7.95	4.65	3.19	40.23	42.18	1.80	5.0	3.5	43.6	45.9	2.0	do	1436
1437	Do. *b*	7.64	4.26	5.00	29.52	51.41	2.17	4.7	5.4	31.9	55.6	2.4	do	1437
1438	Do. *b*	7.64	5.05	3.88	38.44	42.71	2.28	5.4	4.2	41.6	46.3	2.5	do	1438
1439	Do. *b*	7.13	5.20	3.06	35.82	46.59	2.20	5.7	3.3	38.6	50.0	2.4	do	1439
1440	Do. *b*	7.26	4.06	3.06	41.80	42.10	1.72	4.4	3.3	45.0	45.5	1.8	do	1440
1441	Do	10.00	3.67	3.56	37.77	41.96	3.04	4.1	4.0	41.9	46.6	3.4	Me. Ex. Sta. Rep., 1886–'87, p. 68	1441
1442	Do. *a*	18.27	5.66	3.78	34.74	35.37	2.15	6.9	4.6	42.5	43.3	2.7	N. Y. State Ex. Sta. Rep., 1888, p. 238.	1442
	All analyses, excluding No. 1430. Maximum	18.27	6.65	6.88	45.09	51.41	3.15	7.4	7.7	49.1	55.6	3.4		
	Minimum	6.53	3.67	2.66	31.82	33.54	1.72	4.1	3.0	31.9	36.4	1.8		
	Average	**9.22**	**5.13**	**3.95**	**37.03**	**42.36**	**2.31**	**5.6**	**4.4**	**40.7**	**46.8**	**2.5**		
1443	Buckwheat straw	10.35	4.94	4.38	46.83	32.08	1.42	5.5	4.9	52.3	35.7	1.6	Büssey Inst. Bul., 1877, p. 54	1443
1444	Do	10.39	5.16	3.33	44.93	34.49	1.70	5.8	3.7	50.1	38.5	1.9	do	1444
1445	Do. *b*	9.00	6.51	7.75	37.16	38.93	0.65	7.1	8.6	40.9	42.7	0.7	N. J. Ex. Sta. Rep., 1886, p. 164	1445
	Average	**9.91**	**5.53**	**5.15**	**42.97**	**35.19**	**1.25**	**6.1**	**5.8**	**47.7**	**39.0**	**1.4**		
1446	Hungarian grass straw *b*	10.98	6.38	2.75	32.18	46.81	0.90	7.2	3.1	36.2	52.6	0.9	N. J. Ex. Sta. Rep., 1886, p. 164	1446
1447	Cut when ripe; after threshing one fourth of the seed remained in the straw.	14.22	3.65	2.55	45.87	32.77	0.94	4.3	3.0	53.4	38.2	1.1	Ky. Ex. Sta. Bul. 5, 1886	1447
	Average	**12.60**	**5.01**	**2.65**	**39.02**	**39.80**	**0.92**	**5.7**	**3.1**	**44.6**	**45.6**	**1.0**		
1448	Orchard grass straw *b*	6.88	3.93	3.63	36.47	47.73	1.36	4.2	3.9	39.2	51.2	1.5	N. J. Ex. Sta. Rep., 1886, p. 160	1448

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	HAY AND OTHER DRIED COARSE FODDERS—Continued.													
	STRAW—continued.	%	%	%	%	%	%	%	%	%	%	%		
1449	Rice straw	3.66	10.71	4.68	28.31	50.90	1.74	11.1	4.9	29.5	52.7	1.8	N. C. Ex. Sta. Rep., 1882, p. 91	1449
1450	Do. *a*	8.97	19.97	4.72	32.25	32.20	1.87	21.9	5.2	35.4	35.4	2.1	La. Ex. Sta. Bul. 24, p. 389	1450
	Average	**6.32**	**15.34**	**4.70**	**30.28**	**41.55**	**1.81**	**16.5**	**5.1**	**32.4**	**44.0**	**2.0**		
	ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES.													
	Potatoes:													
1451	Norfolk, from Washington market *a*	77.61	0.96	1.32	0.28	19.69	0.14	4.3	5.9	1.2	88.0	0.6	U. S. Dept. Agr. Rep., 1883, p. 234	1451
1452	Early Rose, from Washington market *a*	79.69	0.82	1.14	0.48	17.75	0.12	4.0	5.6	2.4	87.4	0.6	do	1452
1453	Small size	78.88	0.89	2.28	0.61	17.27	0.07	4.2	10.8	2.9	81.8	0.3	N. Y. State Ex. Sta. Rep., 1884, p. 333	1453
1454	Large size	76.20	0.78	2.50	0.59	19.91	0.02	3.3	10.5	2.5	83.6	0.1	do	1454
1455	Small size	80.39	0.85	2.50	0.85	15.33	0.08	4.3	12.8	4.3	78.2	0.4	do	1455
1456	Beauty of Hebron, planted Apr. 27; harvested Aug. 26; more or less scabby.	78.05	1.02	2.98	0.43	17.34	0.18	4.6	13.5	2.0	79.1	0.8	Mass. State Ex. Sta. Rep., 1885, p. 74	1456
1457	Raw	75.90	0.82	2.62	0.55	19.98	0.13	3.4	10.9	2.3	82.9	0.5	Me. Ex. Sta. Rep., 1886-'87, p. 68	1457
1458	Steamed; same as the preceding, except cooked by steaming.	75.37	0.88	2.62	0.68	20.37	0.07	3.6	10.7	2.8	82.6	0.3	do	1458
1459	Polaris *a*	80.20	1.03	2.13	0.38	16.15	0.11	5.2	10.7	1.9	81.6	0.6	Mass. State Ex. Sta. Rep., 1889, p. 185	1459
1460	Beauty of Hebron *a*	80.73	1.00	1.84	0.63	15.69	0.11	5.2	9.6	3.3	81.4	0.5	do	1460
1461	Do. *a*	81.53	1.16	1.80	0.60	14.82	0.09	6.3	9.7	3.2	80.3	0.5	do	1461
1462	Beauty of Hebron, scabby *a*	82.15	1.14	1.92	0.64	14.05	0.10	6.4	10.7	3.5	78.8	0.6	do	1462
	All analyses: Maximum	82.15	1.16	2.98	0.85	20.37	0.18	6.4	13.5	4.3	88.0	0.8		
	All analyses: Minimum	75.37	0.78	1.14	0.28	14.05	0.02	3.3	5.6	1.2	78.2	0.1		
	All analyses: Average	**78.89**	**0.95**	**2.14**	**0.56**	**17.36**	**0.10**	**4.5**	**10.1**	**2.7**	**82.2**	**0.5**		
	Sweet potatoes:													
1463	Variety unknown	65.96	1.07	0.45	2.50	29.72	0.30	3.1	1.3	7.4	87.3	0.9	U. S. Dept. Agr. Rep., 1869, p. 76	1463
1464	Nansemond Improved	73.39	1.07	1.28	0.98	23.00	0.28	4.0	4.8	3.7	86.4	1.1	Am. Jour. Sci. and Arts, 1877, p. 197	1464
1465	Variety unknown	71.51	0.66	1.20	0.60	25.67	0.36	2.3	4.2	2.1	90.1	1.3	U. S. Dept. Agr. Rep., 1883, p. 235	1465
1466	Do	74.38	1.34	3.56	2.14	17.98	0.60	5.2	13.9	8.4	70.2	2.3	N. Y. State Ex. Sta. Rep., 1886, p. 365	1466

1467	Do. *b*	67.90	0.82	1.28	0.60	29.04	0.36	2.5	3.2	1.9	91.2	1.2	N. J. Ex. Sta. Rep., 1886, p. 164	1467
1468	Georgia Bucks *a*	73.31	1.18	1.20	0.77	23.24	0.30	4.2	4.3	2.9	87.5	1.1	S. C. Ex. Sta. Rep., 1888, p. 134	1468
	All analyses. Maximum	74.38	1.34	3.56	2.50	29.72	0.60	5.2	13.9	8.4	91.2	2.3		
	All analyses. Minimum	65.96	0.66	0.45	0.60	17.98	0.28	2.3	1.3	1.9	70.2	0.9		
	All analyses. Average	**71.07**	**1.02**	**1.49**	**1.27**	**24.78**	**0.37**	**3.5**	**5.2**	**3.6**	**86.3**	**1.4**		
	Red beets:													
1469	Variety unknown *a*	87.68	1.05	1.73	1.69	7.64	0.21	8.7	14.0	13.6	62.0	1.7	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1469
	Dewing Blood Turnip, collected—													
1470	June 9; average weight of one, 2 grams. *a*	87.04	1.58	1.79	1.00	8.27	0.32	12.2	13.8	7.7	63.8	2.5	U. S. Dept. Agr. Rep., 1883, p. 238	1470
1471	June 19; length, 9 cm.; average weight of one, 6.4 grams. *a*	86.80	1.24	0.78	0.77	10.19	0.22	9.4	5.9	5.8	77.2	1.7	do	1471
1472	June 26; length, 5.2 cm.; average weight of one, 21.7 grams. *a*	83.40	1.22	1.48	0.88	12.69	0.33	7.4	8.9	5.3	76.4	2.0	do	1472
1473	July 3; breadth, 5.4 cm.; average weight of one, 64.5 grams. *a*	86.69	0.96	0.93	0.89	10.35	0.18	7.2	7.0	6.7	77.8	1.3	do	1473
1474	July 10; breadth, 6.5 cm.; average weight of one, 95 grams. *a*	87.80	0.95	1.47	0.69	8.95	0.14	7.8	12.0	5.7	73.4	1.1	do	1474
1475	July 24; breadth, 6.5 cm.; average weight of one, 49.3 grams. *a*	83.03	1.18	1.88	0.75	12.98	0.18	6.3	11.1	4.4	77.1	1.1	do	1475
1476	Aug. 15; length, 4 cm.; breadth, 5.4 cm.; average weight of one, 74 grams. *a*	85.33	1.16	1.66	0.72	11.03	0.10	7.9	11.3	4.9	75.2	0.7	do	1476
1477	Oct. 25; breadth, 6.5 cm.; average weight of one, 130 grams. *a*	89.46	1.12	1.48	0.64	7.16	0.14	10.6	14.0	6.1	67.9	1.4	do	1477
1478	Norbiton Red	92.16	1.17	1.56	1.07	3.84	0.20	14.9	19.9	13.6	49.1	2.5	Vt. Ex. Sta. Rep., 1888, p. 76	1478
1479	Red Globe, sown May 25, collected Nov. 1; weight of the 3 analyzed (largest, smallest, and medium), 1.13 lbs. *a c*	86.95	1.38	1.58	0.61	9.26	0.23	10.6	12.1	4.5	71.0	1.8	Mass. State Ex. Sta. Rep., 1888, p. 143	1479
1480	Egyptian Turnip, sown May 25, collected Nov. 1; weight of the 3 analyzed (largest, smallest, and medium), 1.13 lbs. *a c*	85.80	0.82	1.11	0.89	11.26	0.12	5.8	7.8	6.2	79.4	0.8	do	1480
1481	Long Smooth Red, sown May 25, collected Nov. 1; weight of the 3 analyzed (largest, smallest, and medium), 1.62 lbs. *a c*	85.49	1.30	1.72	0.79	10.59	0.11	9.0	11.8	5.5	72.9	0.8	do	1481
1482	New Market Gardener *c*	89.65	0.74	1.47	0.78	7.30	0.06	7.2	14.3	7.6	70.3	0.6	Mass. State Ex. Sta. Rep., 1889, p. 184	1482
1483	Eclipse *c*	90.25	0.86	1.51	0.71	6.50	0.07	9.8	15.4	7.2	66.9	0.7	do	1483
1484	Osborne Selected *c*	88.80	0.88	1.62	0.75	7.88	0.07	7.9	14.5	6.7	70.3	0.6	do	1484
	Analyses Nos. 1469, 1478–1484. Maximum	92.16	1.38	1.73	1.69	11.26	0.23	14.9	19.9	13.6	79.4	2.5		
	Analyses Nos. 1469, 1478–1484. Minimum	85.49	0.74	1.11	0.61	3.84	0.06	5.8	7.8	4.6	49.1	0.6		
	Analyses Nos. 1469, 1478–1484. Average	**88.47**	**1.04**	**1.53**	**0.88**	**7.94**	**0.14**	**9.1**	**13.4**	**7.8**	**68.4**	**1.3**		
	Sugar beets:													
1485	French Imperial	84.42	1.13	1.69	0.93	11.75	0.08	7.3	10.8	6.0	75.4	0.5	Conn. State Ex. Sta. Rep., 1884, p. 107	1485
1486	Lane Imperial	87.24	0.93	1.76	0.88	9.13	0.06	7.3	13.7	6.8	71.7	0.5	Ohio Ex. Sta. Rep., 1884, p. 106	1486
1487	Golden Globe	89.78	0.93	1.78	0.78	6.68	0.05	9.0	17.4	7.6	65.5	0.5	Ohio Ex. Sta. Rep., 1884, p. 212	1487

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES—Continued.													
	Sugar beets—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1488	Golden Tankard	90.76	0.92	1.89	0.71	5.67	0.05	10.0	20.4	7.7	61.4	0.5	Ohio Ex. Sta. Rep., 1884, p. 212	1488
1489	Vilmorin; weight of root below leaf mark, 1 lb., 3¾ oz. *e*	84.25	0.73	2.05	1.10	11.77	0.10	4.7	13.0	7.0	74.7	0.6	Mass. State Ex. Sta. Rep., 1885, p. 78	1489
1490	Vilmorin; weight of root below leaf mark, 10 oz. *e*	83.55	0.74	1.67	1.11	12.81	0.12	4.5	10.1	6.8	77.9	0.7	do	1490
1491	Vilmorin; weight of root below leaf mark, 15¼ oz. *e*	80.47	0.75	3.15	1.26	14.25	0.12	3.9	16.1	6.4	73.0	0.6	do	1491
1492	Vilmorin; weight of root below leaf mark, 12½ oz. *e*	85.99	0.60	2.21	0.81	10.31	0.08	4.3	15.8	5.8	73.5	0.6	do	1492
1493	Lane Improved; weight of root below leaf mark, 1 lb., 9¾ oz. *e*	83.57	0.60	2.86	0.86	11.97	0.14	3.6	17.4	5.3	72.9	0.8	do	1493
1494	Imperial *h*	86.94	0.76	2.01	0.79	9.28	0.22	5.8	15.4	6.1	71.2	1.5	Ohio Ex. Sta. Rep., 1886, p. 279	1494
1495	Taken from pit in spring; tops sprouted	88.77	1.22	2.04	0.89	6.99	0.07	10.9	18.2	7.9	62.2	0.8	Ky. Ex. Sta. Bul. 5, 1886, p. 21	1495
1496	Saxony; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 1.7 lbs. *a e*	83.32	0.85	1.22	0.97	13.58	0.06	5.1	7.3	5.8	81.4	0.4	Mass. State Ex. Sta. Rep., 1888, p. 144	1496
1497	Excelsior	87.21	0.83	1.30	0.79	9.75	0.12	6.5	10.2	6.2	76.1	1.0	Mass. State Ex. Sta. Rep., 1889, p. 35	1497
1498	Variety unknown *e*	86.95	0.42	1.13	0.76	10.65	0.09	3.2	8.7	5.8	81.6	0.7	Mass. State Ex. Sta. Rep., 1889, p. 183	1498
1499	Do. *e e*	90.60	0.95	1.20	0.73	6.35	0.17	10.1	12.8	7.8	67.5	1.8	do	1499
1500	Vilmorin *e e*	86.73	0.75	1.12	0.64	10.67	0.09	5.7	8.5	4.8	80.3	0.7	do	1500
1501	Lane Sugar Beet *e*	84.56	1.06	1.63	0.95	11.69	0.11	6.9	10.6	6.2	75.7	0.6	Mass. State Ex. Sta. Rep., 1889, p. 184	1501
1502	Do. *e*	90.13	1.45	1.30	0.96	6.08	0.08	14.6	13.0	9.7	61.9	0.8	Mass. State Ex. Sta. Rep., 1889, p. 187	1502
1503	Saxony *e*	88.38	1.05	1.16	0.78	8.56	0.07	9.1	10.1	6.7	73.5	0.6	Mass. State Ex. Sta. Rep., 1889, p. 188	1503
	All analyses. Maximum	90.76	1.45	3.15	1.26	13.58	0.22	14.6	20.4	9.7	81.6	1.8		
	All analyses. Minimum	80.47	0.42	1.12	0.64	5.67	0.05	3.2	7.3	4.8	61.4	0.4		
	All analyses. Average	**86.50**	**0.88**	**1.75**	**0.88**	**9.89**	**0.10**	**6.5**	**13.0**	**6.5**	**73.3**	**0.7**		
	Mangel-wurzels:													
1504	Variety unknown *a*	92.82	0.91	1.89	0.76	3.56	0.06	12.7	26.4	10.5	49.6	0.8	Conn. State Ex. Sta. Rep., 1881, p. 85	1504
1505	Harn *a*	91.86	1.07	1.57	0.91	4.08	0.51	13.1	19.3	11.2	50.1	6.3	U. S. Dept. Agr. Rep., 1881–'82, p. 553	1505
1506	Yellow Globe; weight of root analyzed, 1.06 lbs. *e*	88.27	0.92	1.51	0.83	8.39	0.08	7.8	12.8	7.1	71.6	0.7	Mass. State Ex. Sta. Rep., 1885, p. 79	1506
1507	Mammoth Large Red	94.41	1.09	1.03	1.00	2.40	0.07	19.6	18.4	17.8	42.9	1.3	N. Y. State Ex. Sta. Rep., 1885, p. 306	1507

1508	Large Red *h*	89.84	0.82	1.54	0.78	6.82	0.20	7.8	15.3	7.8	67.1	2.0	Ohio Ex. Sta. Rep., 1886, p. 279	1508
1509	Giant Long Red; sown May 25; collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs. *a c*	86.92	1.09	1.02	1.25	9.60	0.12	8.4	7.8	9.5	73.4	0.9	Mass. State Ex. Sta. Rep., 1888, p. 142	1509
1510	Yellow Ovoid; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs. 3 oz. *a c*	87.66	1.36	1.29	0.89	8.67	0.13	11.0	10.5	7.2	70.3	1.0	do	1510
1511	Haru Globe	94.34	1.08	1.22	0.60	2.65	0.11	19.1	21.6	10.6	46.8	1.9	Vt. Ex. Sta. Rep., 1888, p. 76	1511
1512	Kinver Globe	91.52	1.13	1.41	0.82	4.90	0.22	13.3	16.6	9.7	57.8	2.6	do	1512
	All analyses: Maximum	94.41	1.36	1.89	1.25	8.67	0.51	19.6	26.4	17.8	73.4	6.3		
	All analyses: Minimum	86.92	0.82	1.02	0.60	2.40	0.06	7.8	7.8	7.1	42.9	0.7		
	All analyses: Average	**90.85**	**1.05**	**1.39**	**0.87**	**5.68**	**0.16**	**11.5**	**15.2**	**9.5**	**62.1**	**1.7**		
	Turnips:													
1513	Southern Prize; weight of root below leaf mark, 11¾ oz. *e*	91.77	0.65	0.80	0.83	5.81	0.14	7.9	9.7	10.1	70.6	1.7	Mass. State Ex. Sta. Rep., 1885, p. 79	1513
1514	Flat	92.40	0.72	1.25	1.20	4.20	0.23	9.4	16.5	15.7	55.3	3.1	N. Y. State Ex. Sta. Rep., 1886, p. 365	1514
1515	Early Yellow or Golden Stone; sown May 25; collected Nov. 1; weight of 3 analyzed (largest, medium, and smallest), 14 oz. *c*	87.20	1.03	1.38	1.41	8.80	0.18	8.0	10.8	11.0	68.8	1.4	Mass. State Ex. Sta. Rep., 1888, p. 145	1515
	Average	**90.46**	**0.80**	**1.14**	**1.15**	**6.27**	**0.18**	**8.4**	**12.4**	**12.2**	**64.9**	**2.1**		
	Ruta-bagas:													
1516	Variety unknown	87.08	1.41	1.15	1.16	9.11	0.09	10.9	8.9	9.0	70.5	0.7	Me. Agr. Col. Rep., 1878, p. 31	1516
1517	White Sweet German; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs., 2 oz. *c*	87.23	1.12	1.32	1.39	8.79	0.15	8.8	10.3	11.0	68.7	1.2	Mass. State Ex. Sta. Rep., 1888, p. 145	1517
1518	Skirving Purple Top; sown May 25, collected Nov. 1; weight of 3 analyzed (largest, smallest, and medium), 2 lbs., 11 oz. *c*	88.40	1.07	1.30	1.35	7.62	0.27	9.2	11.2	11.6	65.7	2.3	do	1518
1519	American *c*	91.75	0.99	0.95	1.09	5.12	0.10	11.9	11.5	13.1	62.3	1.2	Mass. State Ex. Sta. Rep., 1889, p. 187	1519
	Maximum	91.75	1.41	1.32	1.39	9.11	0.27	11.9	11.5	13.1	70.5	2.3		
	Minimum	87.08	0.99	0.95	1.09	5.12	0.09	8.8	8.9	9.0	62.3	0.7		
	Average	**88.61**	**1.15**	**1.18**	**1.25**	**7.66**	**0.15**	**10.2**	**10.5**	**11.1**	**66.9**	**1.3**		
	Carrots:													
1520	Early Half Long *a*	88.82	0.93	1.35	0.86	7.39	0.65	8.3	12.1	7.7	66.1	5.8	U. S. Dept. Agr. Rep., 1880, p. 169	1520
1521	Do. *a*	87.85	1.29	8.97	2.32	6.86	0.71	10.6	8.0	19.1	56.4	5.9	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1521
	Early Long Orange, collected—													
1522	June 9; average weight of one, 0.4 gram.	88.40	2.57	1.26	0.62	6.71	0.44	22.2	10.8	5.4	57.8	3.8	U. S. Dept. Agr. Rep., 1883, p. 239	1522
1523	June 19; length, 11 cm.; average weight of one, 0.94 gram.	88.20	1.55	1.17	1.62	6.74	0.72	13.1	9.9	13.8	57.1	6.1	do	1523
1524	June 26; length, 29 cm.; average weight of one, 16 grams.	87.40	1.54	1.18	0.99	8.55	0.34	12.2	9.4	7.9	67.8	2.7	do	1524
1525	July 3; breadth, 1.5 cm.; average weight of one, 18.2 grams.	87.70	1.36	1.22	1.51	7.64	0.57	11.1	9.9	12.3	62.1	4.6	do	1525
1526	July 10; length, 30 cm.; breadth, 2.5 cm.; average weight of one, 38 grams.	87.30	1.33	0.98	0.90	9.03	0.46	10.5	7.7	7.1	71.1	3.6	do	1526
1527	July 20; length, 30 cm.; breadth, 3 cm.; average weight of one, 74 grams.	87.50	1.26	1.03	1.11	8.44	0.66	10.1	8.3	8.9	67.5	5.2	do	1527

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES—Continued.													
	Carrots—Continued.													
	Early Long Orange, collected—	%	%	%	%	%	%	%	%	%	%	%		
1528	Oct. 15; length, 30 cm.; breadth, 3.4 cm.; average weight of one, 157 grams.	84.30	1.55	1.66	1.25	10.74	0.50	9.9	10.5	8.0	68.4	3.2	U. S. Dept. Agr. Rep., 1883, p. 239	1528
1529	Oct. 25; length, 51 cm.; breadth, 9.6 cm.; average weight of one, 697 grams.	86.80	1.34	1.99	1.55	7.70	0.62	10.3	15.1	11.7	58.3	4.6	do	1529
1530	Variety unknown	86.52	1.05	0.84	0.99	10.40	0.20	7.8	6.2	7.3	77.2	1.5	Ohio Ex. Sta. Rep., 1884, p. 212	1530
1531	Danvers	87.48	0.61	1.21	0.95	9.26	0.49	4.9	9.6	7.6	74.0	3.9	Mass. State Ex. Sta. Rep., 1885, p. 80	1531
1532	Yellow Danvers	91.13	1.00	1.08	1.41	5.09	0.29	11.3	12.2	15.9	57.4	3.2	N. Y. State Ex. Sta. Rep., 1885, p. 306	1532
1533	Variety unknown	90.02	1.12	0.89	1.07	6.71	0.19	11.2	8.9	10.8	67.2	1.9	Mass. State Ex. Sta. Rep., 1887, p. 30	1533
1534	Danvers	90.05	0.82	0.80	1.03	7.13	0.17	8.3	8.0	10.2	71.8	1.7	Mass. State Ex. Sta. Rep., 1889, p. 34	1534
	Analyses, Nos. 1521, 1522, 1530–1535. Maximum	91.13	1.34	1.99	2.32	10.40	0.71	11.3	15.1	19.1	77.2	5.9		
	Analyses, Nos. 1521, 1522, 1530–1535. Minimum	86.52	0.61	0.80	0.86	5.09	0.17	4.9	6.2	7.3	56.4	1.5		
	Analyses, Nos. 1521, 1522, 1530–1535. Average	**88.59**	**1.02**	**1.14**	**1.27**	**7.56**	**0.42**	**8.8**	**10.0**	**11.2**	**66.3**	**3.7**		
	Onions:													
1535	White *a*	85.26	0.68	2.28	0.76	10.80	0.22	4.6	15.5	5.2	73.2	1.5	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1535
	Giant Della Rocca, collected—													
1536	June 29; average weight of one, 3 grams, 22.6 per cent of whole plant. *a*	91.05	0.95	1.12	1.22	5.06	0.60	10.7	12.5	13.6	56.5	6.7	U. S. Dept. Agr. Rep., 1883, p. 240	1536
1537	July 10; breadth, 3.7 cm.; average weight of one, 15 grams, 45.4 per cent of whole plant. *a*	87.19	1.20	1.57	1.35	7.87	0.82	9.4	12.2	10.5	61.5	6.4	do	1537
1538	July 20; breadth, 4 cm.; average weight of one, 30 grams, 62.2 per cent of whole plant. *a*	93.52	0.62	1.10	0.63	3.77	0.36	9.6	17.6	9.8	57.5	5.5	do	1538
1539	Potato *a*	86.48	0.49	0.77	0.73	11.28	0.25	3.6	5.7	5.4	83.4	1.9	U. S. Dept. Agr. Rep., 1883, p. 235	1539
1540	Large Red Wethersfield	90.32	0.42	1.04	0.59	7.39	0.24	4.3	10.8	6.1	76.3	2.5	N. Y. State Ex. Sta. Rep., 1883, p. 151	1540
1541	Yellow Danvers	88.20	0.48	1.14	0.71	9.23	0.24	4.0	9.7	6.0	78.2	2.1	do	1541
1542	Top onions	81.53	0.60	2.11	0.74	14.69	0.24	3.7	11.4	4.0	79.6	1.3	do	1542
	Analyses, Nos. 1536, 1539–1543. Maximum	93.52	0.69	2.28	0.76	14.69	0.36	9.6	17.6	9.8	79.6	5.5		
	Analyses, Nos. 1536, 1539–1543. Minimum	81.53	0.42	0.77	0.59	3.77	0.22	3.6	5.7	4.0	57.5	1.3		
	Analyses, Nos. 1536, 1539–1543. Average	**87.55**	**0.57**	**1.40**	**0.69**	**9.53**	**0.26**	**4.5**	**11.3**	**5.5**	**76.5**	**2.2**		

	Squashes:													
1543	Marrow (flesh)	89.65	0.73	0.96	1.19	7.13	0.34	7.1	9.3	11.5	68.8	3.3	Bussey Inst. Bul., 1877, p. 88	1543
1544	Hubbard (flesh)	85.28	0.91	0.69	0.99	11.98	0.15	6.2	4.5	6.8	81.5	1.0	do	1544
1545	Crooked Neck (flesh)	89.33	0.53	1.11	0.95	8.04	0.04	4.9	10.4	8.9	75.4	0.4	do	1545
1546	Marrow (rind)	85.65	1.49	2.81	2.86	6.43	0.76	10.4	19.6	19.9	44.8	5.3	do	1546
1547	Hubbard (rind)	79.01	1.13	2.75	3.89	12.42	0.80	5.4	13.1	18.5	59.2	3.8	Bussey Inst. Bul., 1877, p. 89	1547
1548	Crooked Neck (rind)	81.35	1.02	2.94	2.82	11.28	0.59	5.5	15.7	15.1	60.4	3.3	Bussey Inst. Bul., 1877, p. 90	1548
1549	Marrow (seeds and stringy matter)	72.35	1.70	5.75	4.48	7.97	7.75	6.1	20.8	16.2	28.8	28.1	Bussey Inst. Bul., 1877, p. 88	1549
1550	Hubbard (seeds and stringy matter)	66.72	1.64	6.07	6.24	11.77	7.56	4.9	18.2	18.7	35.5	22.7	Bussey Inst. Bul., 1877, p. 89	1550
1551	Crooked Neck (seeds and stringy matter)	83.32	0.83	3.99	2.05	6.20	3.61	4.9	23.9	12.2	37.4	21.6	Bussey Inst. Bul., 1877, p. 90	1551
1552	Turban, from Washington market *a*	95.18	0.38	0.64	0.53	2.95	0.32	7.9	13.3	11.0	61.1	6.7	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1552
1553	Crooked Neck, from Washington market *a*	94.58	0.42	0.68	0.54	3.54	0.24	7.7	12.5	9.9	65.5	4.4	do	1553
	Average of the flesh	**88.09**	**1.72**	**0.92**	**1.04**	**9.05**	**0.18**	**6.1**	**8.1**	**9.0**	**75.2**	**1.6**		
	Average of the rind	**82.00**	**1.21**	**2.84**	**3.19**	**10.04**	**0.72**	**7.1**	**16.1**	**18.1**	**54.6**	**4.1**		
	Average of the seeds and stringy matter.	**74.03**	**1.30**	**5.27**	**4.26**	**8.64**	**6.31**	**5.3**	**21.0**	**15.7**	**33.9**	**24.1**		
	Pumpkins:													
1554	Common round yellow (flesh)	92.41	0.71	0.87	1.11	4.80	0.10	9.3	11.5	14.6	63.3	1.3	Bussey Inst. Bul., 1877, p. 83	1554
1555	Smaller round yellow (flesh)	94.37	0.63	0.95	0.86	3.05	0.14	11.6	13.8	15.9	56.2	2.5	do	1555
1556	Common round yellow (rind)	84.44	1.50	2.90	3.92	6.75	0.49	9.6	18.7	25.2	43.4	3.1	Bussey Inst. Bul., 1877, p. 84	1556
1557	Smaller round yellow (rind)	88.01	1.23	2.63	2.97	4.67	0.49	10.3	22.0	24.7	38.9	4.1	do	1557
1558	Common round yellow (seeds and stringy matter).	75.94	1.66	6.32	3.74	5.21	7.13	6.9	26.3	15.5	21.7	29.6	do	1558
1559	Smaller round yellow (seeds and stringy matter).	77.79	1.36	5.68	4.12	4.34	6.71	6.1	25.6	18.5	19.6	30.2	do	1559
1560	Variety unknown	92.27	0.63	1.11	1.49	4.34	0.16	8.2	14.4	19.2	56.1	2.1	N. Y. State Ex. Sta. Rep., 1885, p. 306	1560
	Average of the flesh	**93.39**	**0.67**	**0.91**	**0.98**	**3.93**	**0.12**	**10.4**	**12.7**	**18.3**	**59.7**	**1.9**		
	Average of the rind	**86.23**	**1.36**	**2.76**	**3.45**	**5.71**	**0.49**	**10.0**	**20.4**	**24.9**	**41.1**	**3.6**		
	Average of the seeds and stringy matter.	**76.86**	**1.51**	**6.00**	**3.93**	**4.78**	**6.92**	**6.5**	**25.9**	**17.0**	**20.6**	**30.0**		
	Cucumbers:													
1561	From Washington market *a*	95.70	0.46	0.83	0.85	1.95	0.21	10.7	19.4	19.6	43.3	5.0	U. S. Dept. Agr. Rep., 1883, p. 234	1561
1562	From Washington market, weight 160.2 grams apiece. *a*	96.29	0.45	0.79	0.53	1.72	0.22	12.1	21.5	14.3	46.3	5.8	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1562
	Average	**95.99**	**0.46**	**0.81**	**0.69**	**1.83**	**0.22**	**11.5**	**20.3**	**17.3**	**45.4**	**5.5**		
	Cabbages:													
1563	English cabbage *a*	93.59	0.72	2.06	1.44	2.00	0.19	11.2	32.1	22.4	31.2	3.1	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1563
	Henderson, entire head, collected—													
1564	June 2; height, 29 cm. *a*	88.39	3.43	2.71	0.94	3.86	0.67	29.5	23.3	8.1	33.3	5.8	U. S. Dept. Agr. Rep., 1883, p. 240	1564
1565	June 26; height 33 cm.; average weight of one, 466 grams; beginning to head. *a*	87.39	2.55	2.94	1.32	5.11	0.69	20.2	23.3	10.5	40.5	5.5	do	1565
1566	July 3; height, 30 cm.; average weight of one, 549 grams. *a*	86.01	2.70	2.62	1.55	6.38	0.74	19.3	18.7	11.1	45.6	5.3	do	1566
1567	July 10; height, 30 cm.; average weight of one, 925 grams; well set. *a*	87.46	2.08	2.72	1.51	5.69	0.54	16.6	21.7	12.1	45.3	4.3	do	1567

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	ROOTS, BULBS, TUBERS, AND OTHER VEGETABLES—Continued.													
	Cabbages—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1568	Henderson, interior, collected Oct. 15; average weight of one, 436 grams. *a*	94.31	0.56	1.48	0.54	2.87	0.24	9.8	26.0	9.4	50.5	4.3	U. S. Dept. Agr. Rep., 1883, p. 240	1568
1569	Henderson, outer leaves	89.86	1.35	1.83	2.98	3.51	0.47	13.3	18.1	29.4	34.5	4.7	N. Y. State Ex. Sta. Rep., 1886, p. 365	1569
	Average, Nos. 1563 and 1567	**90.52**	**1.40**	**2.39**	**1.47**	**3.85**	**0.37**	**14.8**	**25.1**	**15.5**	**40.7**	**3.9**		
1570	Cauliflower, from Washington market; weight of heads apiece, 285 grams. *a*	90.82	0.81	1.62	1.02	4.94	0.79	8.9	17.5	11.1	53.9	8.6	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1570
	Lettuce:													
1571	Boston *a*	95.87	0.78	0.97	0.53	1.64	0.21	19.0	23.4	12.9	39.6	5.1	U. S. Dept. Agr. Rep., 1883, p. 234	1571
	Entire plant, collected—													
1572	May 18; average weight of one, 1 gram. *a*	94.39	1.49	1.47	0.55	1.80	0.30	26.5	26.2	9.9	32.1	5.3	U. S. Dept. Agr. Rep., 1883, p. 241	1572
1573	June 2 *a*	90.06	4.72	1.60	0.78	2.42	0.42	47.5	16.1	7.8	24.4	4.2	do	1573
1574	June 9; average weight of one, 96 grams *a*	95.02	1.05	1.15	0.41	2.03	0.34	21.1	23.2	8.2	40.7	6.8	do	1574
1575	June 26; breadth, 17 cm.; average weight of one, 256 grams. *a*	94.59	1.06	1.45	0.84	1.69	0.37	19.6	26.8	15.5	31.3	6.8	do	1575
1576	July 3; breadth, 31 cm.; average weight of one, 266 grams. *a*	94.31	0.94	1.42	0.99	1.88	0.46	16.6	25.0	17.4	33.0	8.0	do	1576
1577	July 14; breadth 60 cm.; average weight of one, 287 grams. *a*	91.50	1.22	1.82	1.09	3.77	0.60	14.4	21.4	12.8	44.4	7.0	do	1577
1578	Stem, collected July 28; breadth, 85 cm.; average weight of one, 287 grams; 41.08 per cent of whole plant. *a*	88.46	1.18	0.88	2.68	6.15	0.65	10.2	7.7	23.2	53.3	5.6	do	1578
1579	Leaves, collected July 28; breadth, 85 cm.; average weight of one, 287 grams; 58.92 per cent of whole plant. *a*	86.28	1.71	2.27	2.57	6.22	0.95	12.5	16.5	18.7	45.4	6.9	do	1579
1580	Spinach, from Washington market *a*	92.42	1.94	2.10	0.67	2.38	0.49	25.7	27.7	8.8	31.4	6.4	U. S. Dept. Agr. Rep., 1883, p. 234	1580
1581	Rhubarb (stems), from Washington market *a*	92.67	0.94	0.83	1.11	3.26	1.19	12.8	11.3	15.2	44.5	16.2	do	1581
	Asparagus:													
1582	Large white, from Washington market; height, 16 cm.; weight, apiece, 1.08 grams. *a*	93.61	0.97	1.64	0.65	2.90	0.23	15.2	25.7	10.2	45.4	3.5	U. S. Dept. Agr. Rep., 1883, p. 235	1582
1583	Small green, from Washington market; height, 15 cm.; weight apiece, 1.03 grams. *a*	94.25	0.53	1.77	0.78	2.42	0.25	9.2	30.9	13.6	42.0	4.3	do	1583

1584	Do. *a*	94.02	0.52	2.07	0.79	2.33	0.27	8.7	34.6	13.2	39.0	4.5	U. S. Dept. Agr. Rep., 1883, p. 234	1584
	Average	**93.96**	**0.67**	**1.88**	**0.74**	**2.55**	**0.25**	**11.1**	**30.2**	**12.2**	**42.8**	**4.2**		
1585	Tomatoes, Acme	91.26	0.73	1.00	0.70	5.84	0.47	8.3	11.3	8.0	67.0	5.4	N. Y. State Ex. Sta. Rep., 1883, p. 151.	1585
1586	Green peas, from Washington market *a*	78.06	0.88	4.37	1.66	14.48	0.55	4.0	9.9	7.6	66.0	2.5	U. S. Dept. Agr. Rep., 1881-'82, p. 555.	1586
1587	Pods of preceding	83.17	0.88	1.54	2.91	10.97	0.53	5.2	9.2	17.3	65.2	3.1	do	1587
1588	Green peas, sugar; pod and seed in edible condition.	81.80	0.67	3.37	1.59	12.15	0.42	3.7	18.5	8.7	66.8	2.3	N. Y. State Ex. Sta. Rep., 1883, p. 151.	1588
	String beans:													
1589	Pet, from Washington market *a*	91.00	0.70	1.65	1.25	5.00	0.40	7.8	18.3	13.9	55.6	4.4	U. S. Dept. Agr. Rep., 1883, p. 234	1589
1590	Early China	83.46	0.83	2.75	2.58	10.94	0.34	5.0	16.5	15.6	60.8	2.1	N. Y. State Ex. Sta. Rep., 1883, p. 151.	1590
	Average	**87.23**	**0.76**	**2.20**	**1.92**	**7.52**	**0.37**	**5.9**	**17.2**	**15.0**	**59.0**	**2.9**		
1591	Lima beans, from Washington market *a*	68.46	1.69	7.15	1.71	20.30	0.69	5.4	22.6	5.4	64.4	2.2	U. S. Dept. Agr. Rep., 1883, p. 235	1591
1592	Okra	87.41	0.74	1.99	3.42	6.04	0.40	5.9	15.8	27.1	48.0	3.2	N. Y. State Ex. Sta. Rep., 1884, p. 333.	1592
1593	Sweet corn, Evergreen, from Washington market *a*	81.25	0.66	2.81	0.51	13.67	1.10	3.5	15.1	2.7	72.9	5.8	U. S. Dept. Agr. Rep., 1883, p. 235	1593
1594	Eggplant, from Washington market; diameter, 5½ inches; weight, 2.45 pounds apiece. *a*	92.93	0.50	1.15	0.77	4.34	0.31	7.0	16.2	10.9	61.5	4.4	do	1594
	FRUIT AND MELONS.													
	Apples:													
1595	Baldwin (flesh); medium size; sound and fair; analyzed in February.	84.11	0.23	0.21	0.91	14.26	0.28	1.5	1.3	5.7	89.7	1.8	Bussey Inst. Bul., 1875, p. 365	1595
1596	Roxbury Russet (flesh); large, fair, and in excellent condition.	82.22	0.26	0.27	0.95	15.77	0.53	1.5	1.5	5.3	88.7	3.0	do	1596
1597	Baldwin (skin), from same apples as No. 1596; skin free from flesh.	71.60	0.45	1.00	5.37	19.31	2.27	1.6	3.5	18.9	68.0	8.0	do	1597
1598	Roxbury Russet (skin), from same apples as No. 1597; skin free from flesh.	69.93	0.53	1.08	5.02	21.73	1.71	1.8	3.6	16.7	72.2	5.7	do	1598
1599	R. I. Greening (stem and seeds not included)	85.96	0.28	0.27	.....	.....	.....	2.0	1.7	.....	.....	.....	Conn. State (Middletown) Ex. Sta. Rep., 1877-'78, p. 39.	1599
1600	Green *a*	85.83	0.52	0.60	1.38	10.43	1.24	3.7	4.2	9.8	73.6	8.7	U. S. Dept. Agr. Rep., 1881-'82, p. 555	1600
1601	Do	82.00	0.64	0.53	1.19	14.30	1.34	3.6	3.0	6.6	79.4	7.4	do	1601
1602	Tolman Sweet	77.30	0.46	0.50	1.37	19.96	0.41	2.0	2.2	6.0	88.0	1.8	N. Y. State Ex. Sta. Rep., 1883, p. 152.	1602
1603	R. I. Greening *k*	82.50	0.37	0.80	1.24	14.60	0.49	2.1	4.6	7.1	83.4	2.8	Mass. State Ex. Sta. Rep., 1885, p. 90	1603
1604	Sweet *k*	82.50	0.35	0.70	1.07	15.09	0.30	2.0	3.9	6.1	86.3	1.7	do	1604
1605	Pears (green) *a*	83.92	0.54	0.56	2.73	11.46	0.79	3.3	3.4	17.5	70.8	5.0	U. S. Dept. Agr. Rep., 1881-'82, p. 555.	1605
1606	Cherries, May Duke; picked June 13 *a**	86.10	0.58	1.10	0.24	11.14	0.84	4.2	7.9	1.7	80.2	6.0	U. S. Dept. Agr. Rep., 1883, p. 235	1606
	Strawberries:													
1607	Monarch, picked June 7 *a**	93.97	0.39	0.58	0.74	3.72	0.60	6.5	9.6	12.2	61.7	10.0	U. S. Dept. Agr. Rep., 1883, p. 234	1607
1608	Monarch, picked June 13 *a**	93.25	0.44	0.59	0.87	4.06	0.77	6.5	8.7	13.0	60.5	11.3	U. S. Dept. Agr. Rep., 1883, p. 235	1608
1609	Sharpless, picked June 13 *a**	90.21	0.60	1.01	0.70	6.38	1.10	6.1	10.3	7.2	65.1	11.3	do	1609
1610	Charles Downing, picked June 13 *a**	91.63	0.62	0.73	1.37	4.82	0.83	7.4	8.8	16.3	57.6	9.9	do	1610
1611	Indiana, picked May 21†	91.51	0.62	1.04	1.27	5.02	0.54	7.2	12.2	14.9	59.3	6.4	Tenn. Ex. Sta. Bul. vol. II, 4, 1889	1611
1612	Jumbo, picked May 21†	90.83	0.55	0.96	1.37	5.69	0.60	6.0	10.4	14.9	62.1	6.6	do	1612

* In *loc. cit.*, free acid given.

† In *loc. cit.*, sugars and free acid given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	FRUIT AND MELONS—Continued.													
	Strawberries—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1613	May King, picked May 22*	90.13	0.66	1.10	1.43	6.06	0.62	6.7	11.2	14.4	61.4	6.3	Tenn. Ex. Sta. Bul. vol. II, 4, 1889	1613
1614	Agriculturist, picked May 22*	91.25	0.58	0.98	1.17	5.40	0.62	6.7	11.2	13.4	61.6	7.1	do	1614
1615	Cornelia, picked May 23*	90.42	0.63	0.94	1.53	6.00	0.48	6.6	9.8	16.0	62.6	5.0	do	1615
1616	Legal Tender, picked May 23*	90.29	0.61	0.99	1.33	6.16	0.62	6.3	10.2	13.7	63.4	6.4	do	1616
1617	Bidwell, picked May 24*	89.43	0.67	1.24	1.99	5.82	0.85	6.4	11.7	18.8	55.1	8.0	do	1617
1618	Primo, picked May 24*	89.98	0.69	1.99	1.68	5.88	0.68	6.9	10.9	16.8	58.6	6.8	do	1618
1619	Namelese, picked May 25*	92.43	0.44	0.76	1.46	4.28	0.63	5.8	10.0	19.2	56.7	8.3	do	1619
1620	Mrs. Garfield, picked May 25*	91.22	0.58	0.95	1.28	5.41	0.56	6.6	10.8	14.5	61.7	6.4	do	1620
1621	Kentucky, picked May 25*	87.72	0.72	1.01	1.64	7.99	0.92	5.9	8.2	13.4	65.0	7.5	do	1621
1622	Jucunda, picked May 25*	90.44	0.73	1.10	2.26	4.67	0.80	7.6	11.3	23.7	49.0	8.4	do	1622
1623	Perry Seedling, picked May 27*	89.71	0.82	1.11	1.80	6.06	0.50	8.0	10.8	17.5	58.8	4.9	do	1623
1624	Boone, picked May 27*	91.35	0.70	0.88	1.97	4.31	0.79	8.1	10.2	22.7	49.9	9.1	do	1624
1625	Manchester, picked May 28*	91.05	0.37	0.99	1.30	5.86	0.43	4.2	11.0	14.5	65.5	4.8	do	1625
	Maximum	93.97	0.82	1.24	2.26	6.38	1.10	8.1	12.2	23.7	65.5	11.3		
	Minimum	87.72	0.37	0.58	0.70	3.72	0.43	4.2	8.2	7.2	49.0	4.8		
	Average	**90.84**	**0.60**	**0.95**	**1.43**	**5.50**	**0.68**	**6.5**	**10.4**	**15.6**	**60.1**	**7.4**		
1626	Raspberries	85.82	0.55	0.99	2.88	.....	.....	3.9	7.0	20.4	.....	.....	N. Y. State Ex. Sta. Rep., 1883, p. 155	1626
1627	Blackberries *a*	88.91	0.58	0.94	2.46	5.03	2.08	5.2	8.5	22.2	45.3	18.8	U. S. Dept. Agr. Rep., 1881–'82, p. 555	1627
1628	Whortleberries *a*	82.42	0.41	0.66	3.17	10.31	3.03	2.4	3.8	18.0	58.6	17.2	do	1628
1629	Lemons *a*	90.22	0.51	0.82	1.31	6.90	0.24	5.2	8.4	13.4	70.5	2.5	do	1629
1630	Lemons, weight, 85 grams apiece *a* †	88.38	0.51	1.09	0.85	7.62	1.55	4.4	9.3	7.3	65.6	13.4	U. S. Dept. Agr. Rep., 1883, p. 234	1630
	Average	**89.30**	**0.51**	**0.95**	**1.08**	**7.27**	**0.89**	**4.7**	**8.8**	**10.1**	**67.9**	**8.5**		
1631	Yellow bananas (interior), weight, 111 grams apiece *a* †	66.25	1.15	1.41	0.96	28.88	1.35	3.4	4.2	2.8	85.6	4.0	do	1631
1632	Pineapple, weight, 671 grams *a* †	89.28	0.35	0.39	0.41	9.31	0.26	3.3	3.6	3.8	86.9	2.4	U. S. Dept. Agr. Rep., 1883, p. 235	1632
	Watermelon:													
1633	Gypsy (rind), percentage of whole, 55.78 *a*	89.97	1.24	1.43	1.41	5.59	0.36	12.4	14.3	14.0	55.8	3.5	U. S. Dept. Agr. Rep., 1883, p. 236	1633
1634	Gypsy (pulp), percentage of whole, 6.87 *a*	91.87	0.33	0.89	0.55	5.64	0.72	4.1	11.1	6.8	69.2	8.8	do	1634
1635	Gypsy (seeds), percentage of whole, 2.24 *a*	48.37	1.34	8.01	12.43	26.22	3.63	2.6	15.5	24.2	50.7	7.0	do	1635
1636	Gypsy (juice), percentage of whole, 35.11	93.05	0.20	0.12		6.63		2.9	1.6		95.5		do	1636

	Nutmeg melon:													
1637	Rind, percentage of whole, 40.49 *a*	91.15	0.68	0.62	0.88	6.17	0.50	7.7	7.0	9.9	69.7	5.7	do	1637
1638	Pulp, percentage of whole, 3.99 *a*	76.44	1.49	1.36	2.13	18.40	0.18	6.3	5.7	9.1	73.9	5.0	do	1638
1639	Pulp juice, percentage of whole, 46.32	90.53	0.56	0.56		8.41		5.9	5.2		88.9		do	1639
1640	Seeds, percentage of whole, 3.27												do	1640
1641	Interior juice, percentage of whole, 5.44	92.61	1.01	0.91		5.47		13.7	12.3		74.0		do	1641
	GRAIN AND OTHER SEEDS.													
	Corn (maize) kernels, dent varieties:													
1642	Yellow dent, raised in California	11.42	1.37	11.31	1.56	69.16	5.18	1.5	12.8	1.8	78.1	5.8	U. S. Census, 1880, vol. III. p. 418	1642
1643	Ohio Dent, raised in Connecticut	10.78	1.37	10.06	1.35	71.36	5.14	1.5	11.3	1.5	79.9	5.8	Conn. State Ex. Sta. Rep., 1878, p. 67	1643
1644	Coe Prolific, raised in Connecticut	9.55	1.45	10.13	2.19	72.70	3.98	1.6	11.2	2.4	80.4	4.4	Conn. State Ex. Sta. Rep., 1879, p. 88	1644
1645	Benton, raised in Connecticut	10.70	1.57	9.97	1.36	71.40	5.00	1.8	11.2	1.5	79.9	5.6	do	1145
1646	Scioto, raised in Connecticut	10.43	1.53	9.25	1.80	72.98	4.61	1.7	10.3	2.0	81.5	4.5	do	1646
1647	White Ohio, raised in Connecticut	9.70	1.79	11.28	1.73	71.30	4.20	1.9	12.5	1.9	79.0	4.7	do	1647
1648	Wisconsin, raised in Connecticut	9.72	1.56	11.60	2.06	70.17	4.89	1.7	12.9	2.3	77.7	5.4	do	1648
1649	White Prolific, raised in Connecticut	10.14	1.67	9.19	1.34	73.38	4.28	1.9	10.2	1.5	81.7	4.7	do	1649
1650	Extra Early Adam, raised in Connecticut	10.94	1.75	10.81	1.48	70.21	4.81	2.0	12.1	1.7	78.8	5.4	do	1650
1651	Early Scioto, raised in Connecticut	15.24	1.28	8.31	1.59	69.78	3.80	1.5	9.9	1.8	82.3	4.5	Conn. State Ex. Sta. Rep., 1880, p. 81	1651
	Average, varieties raised in Connecticut.	**10.80**	**1.55**	**10.07**	**1.65**	**71.47**	**4.46**	**1.8**	**11.3**	**1.9**	**80.0**	**5.0**		
1652	Western White, raised in Illinois	10.77	1.35	11.46	2.47	69.72	4.23	1.5	12.9	2.8	78.1	4.7	Mass. Agr., 1879, p. 244	1652
1653	Western Yellow, raised in Illinois	11.90	1.41	10.89	2.95	68.39	4.46	1.6	12.4	3.3	77.6	5.1	do	1653
1654	White Oil, raised in Indiana	11.29	1.28	10.50	1.90	70.16	4.87	1.4	11.8	2.1	79.1	5.6	Mich. Bd. of Agr. Rep., 1878, p. 409	1654
1655	Yellow dent, raised in Kansas	11.84	1.69	10.56	2.04	68.82	5.11	1.9	11.8	2.3	78.2	5.8	U. S. Dept. Agr. Rep., 1883. p. 216	1655
1656	Striped red and yellow dent, raised in Kansas.	12.10	1.60	10.15	2.40	69.09	4.66	1.8	11.6	2.7	78.6	5.3	do	1656
1657	Dark red dent, raised in Kansas	12.26	1.36	10.33	2.65	68.93	4.47	1.6	11.8	3.1	78.4	5.1	do	1657
1658	White dent, raised in Kansas	12.06	1.56	10.15	2.10	68.44	5.69	1.8	11.6	2.4	77.7	6.5	do	1658
1659	Yellow dent, raised in Kansas	11.46	1.30	9.10	1.71	71.72	4.77	1.5	10.3	1.9	80.9	5.4	do	1059
1660	White dent, raised in Kansas	12.00	1.44	10.68	2.05	69.34	4.49	1.6	12.1	2.4	78.8	5.1	do	1660
	Average, varieties raised in Kansas	**11.94**	**1.49**	**10.15**	**2.16**	**69.39**	**4.87**	**1.7**	**11.6**	**2.5**	**78.6**	**5.6**		
1661	Willie, raised in Kentucky	7.70	1.50	9.80	2.20	73.47	5.33	1.6	10.6	2.4	79.6	5.8	U. S. Dept. Agr. Rep., 1883, p. 215	1661
1662	Early Southern, raised in Massachusetts	12.97	1.64	11.54	2.41	66.61	4.83	1.9	13.3	2.8	76.5	5.5	Mass. Agr., 1879–'80, p. 243	1662
1663	Pride of the North, raised in Massachusetts	8.75	1.45	10.99	2.32	72.53	3.96	1.6	12.1	2.5	79.5	4.3	Mass. State Ex. Sta. Rep., 1887. p. 97	1663
1664	Western dent, raised in Massachusetts	10.20	1.31	8.36	1.68	74.21	4.24	1.5	9.3	1.9	82.6	4.7	Mass. State Ex. Sta. Rep., 1887, p. 98	1664
1665	Yellow dent, raised in Michigan	12.74	1.41	11.75	2.49	66.98	4.63	1.6	13.5	2.9	76.8	5.2	Mich. Bd. Agr. Rep., 1878, p. 408	1665
1666	Do	11.66	1.51	11.48	2.48	67.80	5.07	1.7	13.0	2.8	76.8	5.7	do	1666
1667	White dent, raised in Michigan	13.73	1.60	11.52	2.26	66.26	4.63	1.9	13.4	2.6	76.7	5.4	do	1667
1668	Hackberry dent, raised in Michigan	12.47	1.47	9.88	2.30	69.11	4.77	1.7	11.3	2.7	78.9	5.4	do	1668

* In *loc. cit.*, sugars and free acid given.

† In *loc. cit.*, free acid given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Corn (maize) kernels, dent varieties—Cont'd.	%	%	%	%	%	%	%	%	%	%	%		
1669	Strawberry Roan, raised in Michigan	14.05	1.39	10.31	2.03	67.63	4.59	1.6	12.0	2.4	78.7	5.3	Mich. Bd. Agr. Rep., 1878, p. 409	1669
1670	Pony Dent, raised in Michigan	13.42	1.40	11.25	2.16	66.94	4.83	1.6	13.0	2.5	77.3	5.6	do	1670
1671	Do	13.29	1.31	10.63	2.21	67.53	5.03	1.5	12.4	2.6	77.7	5.8	do	1671
	Average, varieties raised in Michigan.	**13.05**	**1.44**	**10.98**	**2.27**	**67.47**	**4.79**	**1.6**	**12.6**	**2.6**	**77.7**	**5.5**		
1672	Yellow dent, raised in Minnesota	12.14	1.63	9.50	1.62	70.86	4.25	1.9	10.8	1.9	80.6	4.8	U. S. Census, 1880, vol. III	1672
1673	Do*	6.22	1.74	10.44	1.72	75.26	4.62	1.9	11.1	1.8	80.3	4.9	do	1673
1674	Procter Bread, raised in Missouri	7.90	1.65	9.63	2.05	74.12	4.65	1.8	10.4	2.3	80.5	5.0	U. S. Dept. Agr. Rep., 1883, p. 215	1674
1675	Long John, raised in Missouri	8.65	1.75	11.03	2.08	72.22	4.87	2.0	12.0	2.3	78.4	5.3	do	1675
1676	Saint Charles, raised in Missouri	8.20	1.75	8.23	3.10	72.43	6.29	2.0	8.9	3.4	78.8	6.9	do	1676
1677	Snow Flake, raised in Missouri	7.80	1.65	9.63	1.75	74.83	4.34	1.8	10.4	2.0	81.0	4.8	do	1677
1678	Ragan White, raised in Missouri	8.25	1.80	11.03	2.60	70.18	6.14	2.0	12.0	2.8	76.5	6.7	do	1678
1679	Peabody, raised in Missouri	7.95	2.05	9.98	2.60	69.93	7.49	2.2	10.9	2.8	75.9	8.2	do	1679
1680	Badean, raised in Missouri	8.45	2.10	10.85	2.93	69.85	5.82	2.3	11.8	3.2	76.4	6.3	do	1680
1681	Blount Prolific, raised in Missouri	8.05	2.05	12.25	1.98	70.34	5.33	2.3	13.3	2.2	76.4	5.8	do	1681
1682	Thompson, raised in Missouri	8.30	1.80	12.60	2.58	69.78	4.94	2.0	13.7	2.8	76.0	5.5	do	1682
1683	Ragan Yellow, raised in Missouri	8.50	1.45	9.63	2.13	73.44	4.85	1.5	10.5	2.3	80.3	5.4	do	1683
1684	Chester County, raised in Missouri	8.05	1.45	10.85	2.65	70.69	6.31	1.6	11.8	2.9	76.9	6.8	do	1684
1685	Golden Yellow, raised in Missouri	8.30	1.60	10.50	1.43	72.79	5.38	1.7	11.4	1.6	79.4	5.9	do	1685
1686	Pale Yellow, raised in Missouri	8.55	1.65	9.80	2.55	72.23	5.16	1.9	10.7	2.8	78.9	5.7	U. S. Dept. Agr. Rep., 1883, p. 216	1686
1687	Golden Dent, raised in Missouri	7.50	1.50	12.78	1.95	71.51	4.76	1.6	13.8	2.2	77.2	5.2	do	1687
1688	Chester County Mammoth, raised in Missouri.	7.60	1.85	10.33	2.95	70.34	6.93	2.1	11.1	3.2	76.2	7.4	do	1688
1689	New Madrid, raised in Missouri	7.40	1.50	10.68	2.65	71.96	5.81	1.6	11.5	2.9	77.7	6.3	do	1689
1690	Early Yellow, raised in Missouri	7.90	1.75	8.93	2.58	73.41	5.43	2.0	9.7	2.8	78.6	5.9	do	1690
1691	Evans, raised in Missouri	9.05	1.50	8.93	2.55	73.24	4.73	1.7	9.8	2.9	80.4	5.2	do	1691
1692	Gold Dust, raised in Missouri	8.75	1.55	11.55	2.28	70.92	4.95	1.8	12.7	2.5	77.5	5.5	do	1692
1693	Bloody Butcher, raised in Missouri	8.70	1.70	9.98	2.23	72.61	4.78	1.9	11.0	2.4	79.4	5.3	do	1693
1694	Long Yellow, raised in Missouri	8.80	1.30	9.98	2.00	73.04	4.88	1.4	11.0	2.2	80.0	5.4	do	1694
1695	Jersey Red, raised in Missouri	8.30	1.75	10.85	2.45	72.26	4.39	2.0	11.8	2.7	78.7	4.8	do	1695
	Average, varieties raised in Missouri	**8.20**	**1.69**	**10.46**	**2.36**	**71.92**	**5.37**	**1.9**	**11.4**	**2.6**	**78.2**	**5.9**		

1696	Minnesota, raised in New York	12.61	1.45	8.62	2.31	70.67	4.34	1.7	9.9	2.6	80.8	5.0	N. Y. State Ex. Sta. Rep., 1884, p. 331	1696
1697	White dent, raised in North Carolina	6.74	1.43	11.03	1.53	74.09	5.18	1.5	11.8	1.6	79.6	5.5	U. S. Dept. Agr. Rep., 1878, p. 148	1697
1698	White Prolific, raised in Pennsylvania	8.96	1.43	8.05	1.25	74.49	5.82	1.6	8.8	1.4	81.8	6.4	do	1698
1699	Pride of the North, raised in Pennsylvania	8.60	1.25	10.15	2.25	73.10	4.65	1.4	11.1	2.5	79.9	5.1	U. S. Dept. Agr. Rep., 1883, p. 215	1699
1700	Chester County Mammoth, raised in Pennsylvania.	7.80	1.40	8.75	2.33	74.90	4.82	1.5	9.5	2.5	81.3	5.2	do	1700
1701	Field corn, raised in Pennsylvania	7.85	1.45	7.53	1.95	75.73	5.49	1.6	8.2	2.1	82.2	5.9	do	1701
1702	Southern White, raised in South Carolina	9.86	1.37	12.47	2.03	69.78	4.49	1.5	13.8	2.3	77.4	5.0	Mass. Agr., 1879–'80, p. 240	1702
1703	White and yellow dent cross, raised in Texas	10.10	1.44	10.33	3.84	68.96	5.33	1.6	11.4	4.2	76.9	5.9	U. S. Dept. Agr. Rep., 1883, p. 217	1703
1704	White dent, raised in Texas	9.70	1.70	11.03	3.22	69.25	5.10	1.9	12.3	3.5	76.7	5.6	do	1704
1705	Red and yellow dent cross, raised in Texas	10.00	1.40	9.98	1.82	71.38	5.42	1.6	11.1	2.0	79.3	6.0	do	1705
1706	Yellow and white dent, raised in Texas	10.36	1.04	10.68	2.61	70.02	5.29	1.1	11.9	2.9	78.2	5.9	do	1706
1707	Red dent, raised in Texas	10.44	1.44	10.15	2.68	69.67	5.62	1.6	11.4	3.0	77.7	6.3	do	1707
1708	White, red, and yellow dent, raised in Texas	10.52	1.60	9.80	4.81	68.97	5.20	1.8	10.9	5.4	76.1	5.8	do	1708
1709	White dent, raised in Texas	10.84	1.56	10.50	2.41	69.12	5.57	1.8	11.7	2.7	77.5	6.3	do	1709
1710	Do	10.60	1.32	10.85	4.17	67.74	5.32	1.5	12.2	4.7	75.7	5.9	do	1710
1711	Yellow, red, and white dent, raised in Texas	10.42	1.40	10.15	2.06	70.49	5.48	1.6	11.4	2.3	78.6	6.1	do	1711
1712	White dent, raised in Texas	10.20	1.63	10.68	2.31	69.92	5.20	1.8	11.8	2.6	77.9	5.9	do	1712
1713	Red and white dent, raised in Texas	10.14	1.38	10.33	2.40	70.78	4.97	1.6	11.4	2.7	78.7	5.6	do	1713
1714	Yellow, red, and white dent, raised in Texas	10.90	1.30	10.33	2.66	69.06	5.75	1.5	11.5	3.0	77.6	6.4	do	1714
1715	Yellow, white, and red dent, raised in Texas	10.05	1.49	10.68	2.23	70.19	5.36	1.7	11.8	2.4	78.1	6.0	do	1715
1716	Yellow and white dent, raised in Texas	9.27	1.38	10.15	2.14	70.95	6.11	1.5	11.2	2.3	78.3	6.7	do	1716
1717	Yellow, white, and red dent, raised in Texas	10.49	1.52	9.80	2.96	69.65	5.58	1.7	10.9	3.4	77.7	6.3	do	1717
1718	White dent, raised in Texas	10.50	1.42	10.68	2.55	69.34	5.51	1.6	11.9	2.9	77.5	6.1	do	1718
1719	Yellow dent, raised in Texas	11.98	1.32	11.03	2.73	67.79	5.15	1.4	12.5	3.1	77.1	5.9	do	1719
1720	Yellow, red, and white dent, raised in Texas	12.13	1.37	10.33	2.91	66.69	6.57	1.6	11.7	3.3	76.0	7.4	do	1720
1721	White dent, raised in Texas	11.82	1.18	10.15	2.76	68.63	5.46	1.3	11.5	3.2	77.9	6.1	do	1721
	Average, varieties raised in Texas	**10.55**	**1.42**	**10.41**	**2.80**	**69.33**	**5.49**	**1.6**	**11.6**	**3.1**	**77.6**	**6.1**		
1722	Yellow dent, raised in Wisconsin	17.65	1.32	9.53	1.84	66.44	3.22	1.6	11.6	2.2	80.7	3.9	Wis. Ex. Sta. Rep., 1888, p. 78	1722
1723	Do	15.78	2.64	10.30	1.33	65.90	4.05	3.1	12.2	1.6	78.3	4.8	do	1723
1724	Do	19.42	1.42	9.03	1.63	65.40	3.10	1.8	11.2	2.0	81.2	3.8	do	1724
1725	White dent, raised in Wisconsin	18.34	1.34	8.67	1.46	66.02	4.17	1.6	10.6	1.8	80.9	5.1	do	1725
1726	Burrill and Whitman Ensilage, raised in Wisconsin.	13.70	1.55	9.48	2.87	68.09	4.31	1.8	11.0	3.3	78.9	5.0	do	1726
	Average, varieties raised in Wisconsin.	**16.98**	**1.65**	**9.40**	**1.82**	**66.38**	**3.77**	**2.9**	**11.3**	**2.1**	**79.1**	**4.6**		
1727	Southern White, locality not given	13.82	1.32	8.80	0.88	71.06	4.02	1.5	10.3	1.0	82.5	4.7	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29.	1727
1728	Mexican White, locality not given†	11.14	1.45	10.67	1.59	68.87	6.28	1.6	12.0	1.8	77.5	7.1	U. S. Dept. Agr. Rep., 1878, p. 148	1728
	All analyses, dont varieties. Maximum	19.42	2.64	12.78	4.81	75.73	7.49	3.1	13.8	5.4	82.5	8.2		
	All analyses, dont varieties. Minimum	6.22	1.04	7.53	0.88	65.40	3.10	1.3	8.2	1.4	75.9	3.8		
	All analyses, dont varieties. Average	**10.56**	**1.53**	**10.25**	**2.24**	**70.40**	**5.62**	**1.7**	**11.5**	**2.6**	**78.6**	**5.6**		

* Corn of preceding analysis roasted.

† *In loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Corn (maize) kernels, flint varieties:	%	%	%	%	%	%	%	%	%	%	%		
1729	Blount Prolific, raised in Colorado	10.59	1.50	9.80	2.35	70.19	5.66	1.8	10.9	2.6	78.4	6.3	U. S. Dept. Agr., 1883, p. 216	1729
1730	Vermont White Cap, raised in Connecticut	10.86	1.53	11.06	1.04	71.22	4.29	1.7	12.4	1.2	79.9	4.8	Conn. State Ex. Sta. Rep., 1878, p. 67.	1730
1731	Rowley, raised in Connecticut	11.00	1.61	11.63	0.78	70.15	4.83	1.8	13.1	0.9	78.8	5.4	do	1731
1732	Yellow or Canada, 8-rowed, raised in Connecticut.	15.10	1.36	10.01	1.24	66.99	5.31	1.6	11.6	1.7	78.9	6.2	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29.	1732
1733	Old-Fashioned Yellow, raised in Connecticut	10.58	1.43	9.81	1.30	72.11	4.68	1.6	11.0	1.6	80.6	5.2	Conn. State Ex. Sta. Rep., 1879, p. 88.	1733
1734	King Philip, raised in Connecticut	15.97	1.35	10.31	1.37	66.50	4.50	1.6	12.3	1.6	79.1	5.4	Conn. State Ex. Sta. Rep., 1880, p. 81.	1734
1735	Common yellow, raised in Connecticut	15.77	1.26	10.00	1.47	67.06	4.44	1.5	11.9	1.7	79.6	5.3	do	1735
1736	White flint, raised in Connecticut	16.82	1.19	8.94	1.32	67.84	3.89	1.4	10.7	1.6	81.6	4.7	do	1736
1737	Flint, raised in Connecticut	18.16	1.43	9.60	1.47	64.95	4.39	1.8	11.7	1.8	79.4	5.3	Conn. State Ex. Sta. Rep., 1881, p. 83.	1737
1738	Canada Snub corn, raised in Connecticut	16.66	1.03	8.94	0.78	68.55	4.04	1.2	10.7	0.9	82.3	4.9	Conn. State Ex. Sta. Rep., 1884, p. 106.	1738
1739	Canada Yellow corn, raised in Connecticut	16.50	1.32	9.87	0.91	66.58	4.82	1.6	11.8	1.1	79.7	5.8	do	1739
1740	Rhode Island White Cap, raised in Connecticut.	8.71	1.23	11.06	1.07	72.28	5.65	1.3	12.2	1.2	79.2	6.1	Conn. State Ex. Sta. Rep., 1887, p. 119.	1740
	Average, varieties raised in Connecticut.	**14.19**	**1.34**	**10.11**	**1.17**	**68.57**	**4.62**	**1.5**	**11.8**	**1.3**	**80.0**	**5.4**		
1741	Flint corn, raised in Maine	19.60	1.40	7.91	1.78	65.06	4.25	1.7	9.8	2.2	81.0	5.3	Maine Ex. Sta. Rep., 1885–'86, p. 51	1741
1742	Wheeler Prolific, raised in Massachusetts	12.69	1.39	12.06	1.82	67.46	4.58	1.6	13.8	2.1	77.3	5.2	Mass. Agr., 1879–'80, p. 238	1742
1743	Clark, raised in Massachusetts	12.12	1.64	12.12	2.46	66.91	4.75	1.9	13.8	2.8	76.1	5.4	Mass. Agr., 1879–'80, p. 239	1743
1744	Tip, raised in Massachusetts	8.86	1.57	12.85	2.53	68.93	5.26	1.7	14.1	2.8	75.6	5.8	do	1744
1745	Canada, raised in Massachusetts	13.44	1.27	12.02	2.40	66.51	4.56	1.5	13.9	2.8	76.5	5.3	Mass. Agr., 1879–'80, p. 241	1745
1746	Canada Dutton, raised in Massachusetts	14.36	1.42	10.33	2.38	66.51	5.00	1.7	12.1	2.8	77.6	5.8	Mass. Agr., 1879–'80, p. 242	1746
1747	Massachusetts Red, raised in Massachusetts	11.95	1.10	12.06	2.02	69.47	3.40	1.3	13.7	2.3	78.8	3.9	Communicated by analyst, S. P. Sharples; not published.	1747
1748	Massachusetts White, raised in Massachusetts.	10.22	1.44	9.22	1.47	74.24	3.40	1.6	10.3	1.7	82.6	3.8	do	1748
1749	Waushakum, raised in Massachusetts	13.05	1.29	10.69	1.11	69.80	4.06	1.5	12.3	1.3	80.2	4.7	U. S. Census, 1880, vol. III, p. 415	1749
1750	No. 1749, roasted, raised in Massachusetts	4.53	1.41	11.06	1.35	76.74	4.91	1.5	11.6	1.4	80.4	5.1	do	1750
1751	Topover, raised in Massachusetts	11.55	1.30	12.39	1.73	67.18	5.85	1.5	14.0	2.0	75.9	6.6	Mass. Ex. Sta. Rep., 1885, p. 81	1751
1752	Canada, raised in Massachusetts	9.76	1.60	10.38	1.97	70.53	5.76	1.8	11.5	2.2	78.1	6.4	Mass. Ex. Sta. Rep., 1887, p. 99	1752
1753	Adams White, 12-rowed, raised in Massachusetts.	10.96	1.39	7.90	1.98	72.99	4.78	1.6	8.9	2.2	81.9	5.4	do	1753
	Average, varieties raised in Massachusetts.	**11.12**	**1.40**	**11.09**	**1.93**	**69.77**	**4.69**	**1.6**	**12.4**	**2.1**	**78.6**	**5.3**		

1754	Smut Nose, raised in Michigan	12.90	1.54	11.81	2.00	66.81	4.94	1.8	13.6	2.3	76.6	5.7	Mich. Bd. Agr. Rep., 1878, p. 409	1754
1755	Do	13.26	1.49	11.51	2.49	66.11	5.14	1.7	13.3	2.9	76.2	5.9	do	1755
1756	Eight-rowed flint, raised in Michigan	13.45	1.43	12.80	2.26	66.03	4.83	1.7	13.9	2.6	76.3	5.5	do	1756
1757	Sanford, raised in Michigan	13.37	1.37	10.69	2.10	67.41	5.06	1.6	12.3	2.4	77.8	5.9	do	1757
	Average, varieties raised in Michigan	**13.24**	**1.46**	**11.50**	**2.21**	**66.60**	**4.96**	**1.7**	**13.2**	**2.5**	**76.8**	**5.8**		
1758	White flint, raised in Missouri	7.60	1.55	11.90	2.50	71.52	4.93	1.7	12.8	2.7	77.5	5.3	U. S. Dept. Agr. Rep., 1883, p. 215	1758
1759	Pennsylvania, raised in Missouri	8.25	1.55	9.98	1.90	74.27	4.05	1.7	10.9	2.1	80.9	4.4	do	1759
1760	Early Canada, raised in Missouri	8.70	1.45	10.68	2.00	72.50	4.67	1.6	11.7	2.2	79.4	5.1	do	1760
1761	Adams, raised in New Hampshire *	8.61	1.57	10.50	1.19	73.30	4.83	1.7	11.5	1.3	80.2	5.3	U. S. Dept. Agr. Rep., 1878, p. 149	1761
1762	Canada, raised in New Hampshire*	8.27	1.72	11.36	1.26	71.79	5.60	1.9	12.4	1.4	78.3	6.0	do	1762
1763	Small 12-rowed, raised in New Hampshire*	11.48	1.34	10.50	1.09	69.56	6.03	1.5	11.9	1.2	78.6	6.8	do	1763
1764	State Fair Premium, raised in New Hampshire.*	10.19	1.78	10.82	1.06	70.86	5.29	2.0	12.1	1.2	78.9	5.8	do	1764
1765	Large Premium, raised in New Hampshire*	10.00	1.46	11.36	1.09	70.57	5.52	1.6	12.6	1.2	78.4	6.2	do	1765
1766	Board of Agrioulture, raised in New Hampshire.*	11.09	1.31	11.55	0.82	70.55	4.68	1.5	13.0	0.9	79.4	5.2	do	1766
1767	King Philip, raised in New Hampshire*	10.23	1.34	12.08	1.01	67.79	7.05	2.0	13.5	1.1	75.5	7.9	do	1767
1768	Small 8-rowed, raised in New Hampshire*	11.05	1.57	13.65	1.30	67.63	4.80	1.8	15.3	1.5	76.0	5.4	U. S. Dept. Agr. Rep., 1878, p. 148	1768
1769	Miscegenation (white and blue), raised in New Hampshire.*	9.92	1.63	11.72	1.05	70.35	5.33	1.8	13.0	1.2	78.1	5.9	do	1769
1770	Pitch Knot, raised in New Hampshire*	11.24	1.52	11.20	1.04	69.74	5.26	1.7	12.6	1.2	78.6	5.9	do	1770
1771	Tom Thumb (yellow), raised in New Hampshire.*	9.05	1.60	12.60	1.33	69.53	5.89	1.7	13.9	1.4	76.5	6.5	do	1771
	Average, varieties raised in New Hampshire.	**10.10**	**1.53**	**11.58**	**1.11**	**70.20**	**5.48**	**1.7**	**12.8**	**1.2**	**78.2**	**6.1**		
1772	Corn, upper ear, raised in New York	10.66	1.21	10.77	1.16	71.02	5.18	1.3	11.9	1.3	79.7	5.8	N. Y. State Ex. Sta. Rep., 1883, p. 151	1772
1773	Corn, lower ear, raised in New York	9.37	1.14	9.74	1.12	73.42	5.21	1.3	10.8	1.2	81.0	5.7	do	1773
1774	Corn, upper ear, raised in New York	8.50	1.27	10.86	0.67	74.00	4.70	1.4	11.8	0.8	80.9	5.1	do	1774
1775	Corn, lower ear, raised in New York	8.82	1.26	9.91	1.11	74.54	4.36	1.4	11.0	1.2	81.6	4.8	do	1775
1776	Waushakum, raised in New York	11.91	1.38	11.12	1.91	68.66	5.02	1.5	12.6	2.2	78.0	5.7	N. Y. State Ex. Sta. Rep., 1884, p. 331	1776
1777	Oregon White, raised in Oregon*	9.25	1.40	7.88	1.26	73.07	7.08	1.1	8.7	1.4	81.0	7.8	U. S. Dept. Agr. Rep., 1878, p. 148	1777
1778	Compton Early, raised in Pennsylvania*	6.59	1.64	9.90	2.09	74.48	5.30	1.8	10.6	2.2	79.7	5.7	U. S. Dept. Agr. Rep., 1878, p. 149	1778
1779	White Prolific, raised in Pennsylvania*	8.96	1.43	8.05	1.25	74.49	5.82	1.6	8.8	1.4	81.8	6.4	U. S. Dept. Agr. Rep., 1878, p. 215	1779
1780	Improved Prolific, raised in Tennessee*	7.58	1.23	9.29	2.65	74.16	5.09	1.3	10.1	2.9	80.2	5.5	U. S. Dept. Agr. Rep., 1878, p. 148	1780
1781	Wild Goose, raised in Texas*	8.40	1.45	10.33	2.20	72.71	4.91	1.6	11.1	2.4	78.6	5.3	U. S. Dept. Agr. Rep., 1883, p. 215	1781
1782	Vermont, raised in Vermont	8.64	1.45	16.14	1.38	72.76	5.63	1.6	11.1	1.5	79.6	6.2	U. S. Dept. Agr. Rep., 1878, p. 149	1782
1783	Yakima City, raised in Washington Territory.	10.30	1.50	8.40	2.88	71.19	5.73	1.7	9.4	3.2	79.4	6.3	U. S. Dept. Agr. Rep., 1883, p. 217	1783
1784	Variety unknown, raised in Wisconsin *a*	13.06	1.60	10.36	1.39	68.42	5.17	1.8	11.9	1.6	78.7	6.0	Wis. Ex. Sta. Rep., 1888, p. 78	1784
1785	King Philip, raised in Wisconsin *a*	13.30	1.18	9.56	1.57	70.64	3.75	1.4	11.0	1.8	81.5	4.3	do	1785
1786	Variety unknown	12.60	1.49	9.93	1.99	67.50	6.49	1.7	11.4	2.3	77.2	7.4	do	1786
1787	Early Dutton, 12-rowed, kernels rather small, locality not given.	8.08	1.52	9.62	2.52	72.62	5.64	1.7	10.5	2.7	79.0	6.1	Am. Jour. Sci. and Arts, 1869, p. 352	1787

* *In loc cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Corn (maize) kernels, flint varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1788	Common Yellow or Canada, 8-rowed, kernels good size, locality not given.	10.52	1.31	9.72	2.40	71.63	4.42	1.5	10.9	2.7	80.0	4.9	Am. Jonr. Sci. and Arts, 1869, p. 352	1788
1789	King Philip or Rhode Island, 8-rowed, kernels large.	9.79	1.60	11.87	2.21	70.08	4.45	1.8	13.2	2.4	77.7	4.9	do	1789
1790	Yellow or Canada, locality not given	15.10	1.36	10.01	1.24	66.99	5.31	1.6	11.6	1.7	78.9	6.2	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29.	1790
1791	Western Yellow, locality not given	13.93	1.25	8.82	1.59	70.49	3.92	1.5	10.2	1.9	81.9	4.5	do	1791
1792	White Mexican, locality not given*	8.65	1.87	10.15	1.64	72.79	4.90	2.0	11.1	1.8	79.7	5.4	U. S. Dept. Agr. Rep., 1878, p. 148	1792
1793	Yellow corn, locality not given	9.86	1.92	10.85	2.38	70.36	4.63	2.1	12.0	2.6	78.1	5.2	U. S. Dept. Agr. Rep., 1881–'82, p. 553.	1793
1794	Queen of the Prairie, locality not given	9.40	1.55	10.15	2.85	71.06	4.29	1.7	12.0	3.1	78.4	4.8	U. S. Dept. Agr. Rep., 1883, p. 217	1794
1795	Mexican No. 9 locality not given	8.35	1.75	7.00	2.03	73.74	7.13	1.9	7.7	2.2	80.4	7.8	do	1795
1796	Mexican, locality not given	7.95	1.30	8.40	2.20	74.62	5.53	1.4	9.1	2.4	81.1	6.0	do	1796
	All analyses, flint varieties. Maximum	19.60	1.92	13.65	2.88	76.74	7.13	2.1	14.0	3.2	82.7	7.9		
	Minimum	4.53	1.03	7.00	0.67	64.95	3.40	1.1	7.7	0.8	75.5	4.3		
	Average	**11.81**	**1.44**	**10.52**	**1.65**	**70.09**	**4.99**	**1.7**	**11.8**	**1.9**	**79.0**	**5.6**		
	Corn (maize) kernels, sweet varieties:													
1797	Stowell Evergreen, raised in Connecticut	10.86	1.89	11.10	2.63	65.86	7.66	2.1	12.5	3.0	73.8	8.6	Am. Jour. Sci. and Arts, 1869, p. 352	1797
1798	Immature corn	10.12	2.19	14.50	2.57	62.70	7.92	2.4	16.1	2.9	69.8	8.8	Conn. State Ex. Sta. Rep., 1878, p. 67.	1798
1799	Boiling corn	10.09	2.08	15.31	2.52	61.78	8.22	2.3	17.0	2.8	68.8	9.1	do	1899
1800	Full grown corn	9.45	2.06	14.38	1.93	63.05	9.13	2.3	15.9	2.1	69.6	10.1	do	1800
1801	Mammoth, raised in Connecticut	9.43	1.93	12.32	2.75	66.09	7.48	2.1	13.6	3.0	73.0	8.3	Conn. State Ex. Sta. Rep., 1879, p. 88.	1801
1802	Sugar corn, raised in Kansas	10.76	1.90	10.33	3.10	65.85	8.06	2.1	11.6	3.5	73.8	9.0	U. S. Dept. Agr. Rep., 1878, p. 148	1802
1803	Egyptian, raised in Maryland*	7.54	1.92	11.55	2.02	69.17	7.80	2.1	12.6	2.2	74.6	8.5	do	1803
1804	Golden Sugar, raised in Massachusetts*	6.27	1.93	14.35	1.58	66.70	9.17	2.1	15.3	1.7	71.1	9.8	do	1804
1805	Marblehead Mammoth, raised in Massachusetts.*	6.47	1.92	12.78	1.88	67.95	9.00	2.1	13.7	2.0	72.6	9.6	do	1805
1806	Procter, raised in Massachusetts*	10.13	1.92	12.08	1.75	66.17	7.95	2.1	13.4	2.0	73.7	8.8	do	1806
1807	Blue Texas, raised in Massachusetts	7.74	1.60	13.86	2.56	65.54	8.70	1.7	15.0	2.8	71.1	9.4	Mass. Agr., 1879–'80, p. 240	1807
1808	Crosby, raised in Massachusetts	10.50	1.77	11.60	2.47	66.75	6.91	2.0	13.0	2.8	74.5	7.7	Mass. Agr., 1879–'80, p. 245	1808
1809	Yellow Sweet, raised in Massachusetts	10.90	1.92	12.24	2.30	68.85	3.79	2.2	12.6	2.6	78.3	4.3	Mass. State Ex. Sta, Rep., 1886, p. 41.	1809
	Average, varieties raised in Massachusetts.	**8.7**	**1.8**	**12.8**	**2.1**	**67.0**	**7.6**	**2.0**	**14.0**	**2.3**	**73.4**	**8.3**		

1810	Red River, raised in Minnesota*	9.13	1.89	11.73	1.46	66.48	9.31	2.1	12.9	1.6	73.2	10.2	U. S. Dept. Agr. Rep., 1878, p. 148	1810
1811	Eight-rowed, raised in New York*	10.10	1.66	10.10	2.44	67.56	8.14	1.9	11.3	2.7	75.0	9.1	N. Y. State Ex. Sta. Rep., 1884, p. 331	1811
1812	Black Sugar, raised in Pennsylvania	8.50	1.90	11.38	3.53	65.81	8.88	2.1	12.4	3.9	71.9	9.7	U. S. Dept. Agr. Rep., 1883, p. 218	1812
1813	Darling Sugar, raised in Pennsylvania	7.80	1.95	10.50	3.03	67.64	9.08	2.1	11.4	3.3	73.4	9.8	do	1813
1814	Egyptian, raised in Pennsylvania	7.40	1.70	11.73	3.08	68.01	8.08	1.8	12.7	3.3	73.5	8.7	do	1814
1815	Stowell Evergreen, raised in Pennsylvania	7.00	2.35	11.73	4.58	62.45	11.89	2.5	12.6	4.9	67.2	12.8	do	1815
1816	Do	7.85	2.25	9.45	3.50	69.12	7.83	2.4	10.3	3.8	75.0	8.5	do	1816
1817	Roslyn Hybrid, raised in Pennsylvania	7.85	1.75	9.98	5.24	66.41	8.77	1.9	10.8	5.7	72.1	9.5	do	1817
1818	Early Minnesota, raised in Pennsylvania	9.50	2.10	10.58	3.14	65.56	9.12	2.3	11.7	3.5	72.4	10.1	do	1818
1819	Egyptian, raised in Pennsylvania	8.10	2.15	9.98	3.76	68.05	7.96	2.3	10.9	4.1	74.0	8.7	do	1819
	Average, varieties raised in Pennsylvania.	**8.00**	**2.02**	**10.67**	**3.73**	**66.63**	**8.95**	**2.2**	**11.6**	**4.0**	**72.4**	**9.8**		
1820	Prolific, locality not given*	10.38	1.87	10.33	2.04	67.73	7.65	2.1	11.5	2.3	75.6	8.5	U. S. Dept. Agr. Rep., 1878, p. 148	1820
1821	Mexican Blue, locality not given*	8.97	1.42	10.21	1.80	72.35	5.25	1.6	11.2	2.0	79.4	5.8	do	1821
1822	Stowell Evergreen, locality not given*	5.98	1.92	11.91	2.66	69.53	8.00	2.0	12.7	2.8	74.0	8.5	do	1822
1823	Burr, locality not given	10.68	2.22	11.69	4.94	62.70	7.77	2.5	13.1	5.5	70.2	8.7	Communicated by analyst, S. P. Sharples.	1823
	All analyses, sweet varieties. Maximum	10.86	2.35	15.31	5.24	72.35	11.90	2.5	17.0	5.5	79.4	12.8		
	Minimum	5.98	1.42	9.45	1.46	61.78	3.79	1.6	10.3	1.6	67.2	4.3		
	Average	**8.82**	**1.92**	**11.62**	**2.79**	**66.72**	**8.13**	**2.1**	**12.8**	**3.1**	**73.2**	**8.8**		
	Corn (maize) kernels, pop varieties:													
1824	White pop*	8.61	1.63	13.13	2.32	68.68	5.63	1.8	14.4	2.5	75.1	6.2	U. S. Dept. Agr. Rep., 1878, p. 149	1824
1825	White and yellow pop	12.55	1.28	10.34	1.16	70.49	4.18	1.5	11.8	1.3	80.6	4.8	U. S. Census, 1880, vol. III, p. 418	1825
1826	White and yellow pop, No. 1825 popped	4.10	1.40	11.06	1.44	77.26	4.74	1.5	11.5	1.5	80.6	4.9	do	1826
1827	White pop	11.84	1.24	9.69	1.22	71.09	4.92	1.4	11.0	1.4	80.6	5.6	do	1827
1828	White pop, No. 1827 popped	4.38	1.35	10.25	1.26	77.34	5.42	1.4	10.7	1.3	80.9	5.7	do	1828
1829	Pearl pop	9.84	1.74	11.72	2.34	68.38	5.98	1.9	13.0	2.6	75.9	6.6	N. Y. State Ex. Sta. Rep., 1884, p. 331	1829
	Pop varieties, Nos. 1824, 1825, 1827, and 1829. Maximum	12.60	1.74	13.13	2.34	71.09	5.98	1.9	14.4	2.6	80.9	6.6		
	Minimum	8.61	1.24	9.69	1.16	68.38	4.18	1.4	11.0	1.3	75.1	4.8		
	Average	**10.71**	**1.47**	**11.22**	**1.76**	**69.66**	**5.18**	**1.7**	**12.5**	**2.0**	**78.0**	**5.8**		
	Corn (maize) kernels, soft varieties:													
1830	Tuscarora	11.25	1.47	11.44	1.28	68.82	5.74	1.7	12.9	1.4	77.5	6.5	Conn. State Ex. Sta. Rep., 1878, p. 67.	1830
1831	Do	14.08	1.52	10.86	1.80	65.97	5.77	1.8	12.6	2.1	76.8	6.7	Mich. Bd. Agr., 1878, p. 409	1831
1832	Do	7.70	1.85	11.38	2.08	71.65	5.34	2.0	12.3	2.3	77.6	5.8	U. S. Dept. Agr. Rep., 1883, p. 215	1832
1833	Do	7.17	1.41	8.82	1.59	75.50	5.51	1.5	9.5	1.7	81.4	5.9	N. Y. State Ex. Sta. Rep., 1884, p. 331.	1833
1834	Zuni Black	6.09	1.60	14.56	3.25	69.50	5.00	1.7	15.5	5.5	74.0	5.3	N. Y. State Ex. Sta. Rep., 1885, p. 304.	1834
	All analyses, soft varieties. Maximum	14.08	1.85	14.56	3.25	75.50	5.74	2.0	15.5	5.5	81.4	6.7		
	Minimum	6.09	1.41	8.82	1.28	65.97	5.00	1.5	9.5	1.4	74.0	5.3		
	Average	**9.26**	**1.57**	**11.41**	**2.00**	**70.29**	**5.47**	**1.8**	**12.5**	**2.2**	**77.4**	**6.1**		

* *In loc cit.*, sugar, gum, and albuminoids, soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Corn (maize) kernels, unclassified:	%	%	%	%	%	%	%		%	%	%		
1835	Variety unknown, grown in Illinois	13.61	1.35	9.19	3.13	69.10	3.62	1.6	10.6	3.6	80.0	4.2	Communicated by analyst, S. P. Sharples.	1835
1836	Golden 8-rowed, grown in Massachusetts	12.51	1.58	10.25	1.35	69.37	4.97	1.8	11.7	1.5	79.3	5.7	do	1836
1837	Red, grown in New Mexico	10.85	1.60	11.09	1.60	68.97	5.89	1.8	12.5	1.8	77.3	6.6	do	1837
1838	Kansas corn, grown in New Mexico	11.34	1.07	8.81	1.28	72.90	4.60	1.2	9.9	1.4	82.3	5.2	do	1838
1839	Western corn	20.68	1.19	7.83	1.65	64.95	3.70	1.5	9.9	2.1	81.8	4.7	Conn. State Ex. Sta. Rep., 1880, p. 81.	1839
1840	Do	20.22	1.16	8.54	1.67	64.86	3.55	1.5	10.7	2.1	81.2	4.5	do	1840
1841	Do	16.41	1.25	8.57	1.76	68.16	3.85	1.5	10.3	2.1	81.6	4.5	do	1841
1842	White corn, grown in New Mexico	10.92	1.58	10.06	1.75	70.10	5.59	1.8	11.3	2.0	78.6	6.3	U. S. Census, 1880, vol. III, p. 420	1842
1843	Nebraska red corn, grown in Massachusetts	10.74	1.29	12.64	3.00	66.93	5.40	1.4	14.2	3.4	74.9	6.1	Mass. State Ex. Sta. Rep., 1883, p. 68.	1843
1844	Corn No. 10, grown in New York	12.84	1.15	7.52	0.98	73.88	3.63	1.4	8.6	1.1	84.8	4.1	N. Y. State Ex. Sta. Bul. 70	1844
1845	Hampden Prolific, grown in Massachusetts	11.43	1.53	10.06	1.82	71.06	4.00	1.7	11.4	2.2	80.2	4.5	Mass. State Ex. Sta. Bul. 14, 1884	1845
1846	Do	8.02	1.45	12.73	1.82	71.11	4.87	1.7	13.7	2.0	77.3	5.3	do	1846
1847	Western yellow	13.93	1.25	8.82	1.59	70.49	3.92	1.5	10.2	1.9	81.9	4.5	Kans. Agr. Col. Rep., 1884, p. 5	1847
1848	Variety unknown	10.39	2.03	10.88	1.83	69.65	5.22	2.3	12.1	2.0	77.7	5.9	Vt. Ex. Sta. Rep., 1887, p. 136	1848
1849	No 2 High mixed, analyzed in December*	20.00	1.25	8.06	1.54	65.38	3.77	1.6	10.1	1.9	81.7	4.7	Conn. State Ex. Sta. Rep., 1888, p. 150.	1849
1850	Good Western corn, analyzed in December*	19.73	1.06	8.68	1.61	64.87	4.05	1.3	10.7	2.0	81.0	5.0	do	1850
1851	Mason County yellow corn, best quality, analyzed in December.*	20.30	1.10	8.40	1.38	65.20	3.62	1.4	10.5	1.7	82.0	4.4	do	1851
1852	New York corn, analyzed in December †	14.64	1.12	9.30	1.42	69.57	3.95	1.2	8.4	1.6	84.1	4.7	do	1852
1853	No. 2 High mixed, analyzed in December †	13.00	1.20	9.40	1.53	70.67	4.11	1.3	10.8	1.8	81.4	4.7	do	1853
	All analyses, all varieties of corn kernels. Minimum	20.68	2.64	15.31	5.24	76.74	11.89	3.1	17.0	5.7	84.8	12.8		
	Maximum	4.50	1.03	7.00	0.67	61.78	3.10	1.1	7.7	0.8	67.2	3.8		
	Average	**10.89**	**1.52**	**10.49**	**2.05**	**69.70**	**5.35**	**1.7**	**11.7**	**2.4**	**78.1**	**6.1**		
	Corn (maize) kernels, field-cured, dent varieties:													
1854	Yellow Dent *c*	33.50	1.06	6.25	0.93	55.33	2.93	1.6	9.4	1.4	83.2	4.4	Mass. State Ex. Sta. Rep., 1889, p. 147	1854
1855	Do. *c*	32.49	1.26	7.38	1.00	53.21	3.66	1.9	11.1	1.5	80.0	5.5	do	1855
1856	Do. *c*	28.75	0.85	6.62	1.21	58.94	3.63	1.2	9.3	1.7	82.7	5.1	do	1856
	White-Edged Dent, crop of 1888—‡													
1857	One stalk in 4 feet *h i j*	36.17	1.07	7.95	0.95	50.29	3.57	1.7	12.6	1.5	78.6	5.6	Conn. State Ex. Sta. Rep., 1889, p. 24	1857
1858	One stalk in 2 feet *h i j*	31.00	1.05	8.28	1.11	54.57	3.99	1.5	12.0	1.6	79.3	5.6	do	1858
1859	One stalk to a foot *h i j*	37.37	9.91	6.38	0.96	50.78	3.60	1.5	10.2	1.6	81.0	5.7	do	1859
1860	Two stalks to a foot *h i j*	32.40	0.78	6.23	1.19	55.51	3.89	1.2	9.2	1.8	82.0	5.8	do	1860
1861	Two stalks to a foot (extra phosphate) *h i j*	36.63	0.78	6.01	1.00	52.01	3.57	1.2	9.5	1.5	82.2	5.6	do	1861

1862	Four stalks to a foot *h i j*	37.85	0.77	4.82	0.97	52.15	3.44	1.2	7.8	1.5	84.0	5.5	do	1862
1863	Four stalks to a foot (extra phosphate) *h i j*	35.97	0.69	4.40	0.91	54.50	3.53	1.1	6.9	1.4	85.1	5.5	do	1863
1864	Eight stalks to a foot *h i j*	37.17	0.79	5.46	0.93	52.23	3.42	1.2	8.7	1.4	83.3	5.4	do	1864
	White-Edged Dent, crop of 1889—‡													
1865	One stalk in 4 feet *h i j*	32.99	1.08	8.15	1.77	52.22	3.79	1.5	12.2	2.7	77.9	5.7	Conn. State Ex. Sta. Rep., 1889, p. 222	1865
1866	One stalk in 2 feet *h i j*	33.52	1.04	7.76	1.52	52.28	3.88	1.5	11.7	2.3	78.7	5.8	do	1866
1867	One stalk to a foot *h i j*	31.19	0.93	5.78	1.57	57.03	3.50	1.3	8.5	2.3	82.6	5.3	do	1867
1868	Two stalks to a foot *h i j*	28.91	0.77	5.87	1.39	59.40	3.66	1.1	8.2	2.0	83.5	5.2	do	1868
1869	Four stalks to a foot *h i j*	34.68	0.72	5.20	1.39	54.73	3.28	1.1	7.9	2.1	83.9	5.0	do	1869
1870	Eight stalks to a foot *h i j*	39.28	0.69	5.28	1.35	50.45	2.95	1.2	8.7	2.2	83.0	4.9	do	1870
	Analyses, field-cured kernels, dent varieties. Maximum	39.28	1.26	8.28	1.77	59.40	3.99	1.9	12.6	2.7	85.1	5.8		
	Minimum	28.75	0.69	4.40	0.91	50.29	2.93	1.1	6.9	1.4	77.9	4.4		
	Average	**34.17**	**0.89**	**6.34**	**1.18**	**53.88**	**3.54**	**1.3**	**9.6**	**1.8**	**81.9**	**5.4**		
	From small and immature ears:													
1871	Variety unknown, 2.06 per cent of the stover. *a.* †	17.70	1.35	6.71	1.81	68.17	4.25	1.6	7.7	2.2	81.9	5.1	Pa. Ex. Sta. Rep., 1887, p. 154	1871
	White-Edged Dent—‡													
1872	One stalk in 4 feet *h i j*	57.53	0.91	5.44	0.89	33.46	1.77	2.2	12.8	2.1	78.6	4.3	Conn. State Ex. Sta. Rep., 1889, p. 24	1872
1873	One stalk in 2 feet *h i j*	31.21	1.20	8.56	1.03	54.06	3.94	1.7	12.4	1.5	78.7	5.7	do	1873
1874	One stalk to a foot *h i j*	34.00	1.04	8.00	1.06	52.24	3.66	1.6	12.2	1.6	79.0	5.6	do	1874
1875	Two stalks to a foot *h i j*	37.36	0.97	7.30	1.10	50.05	3.22	1.6	11.4	1.8	80.0	5.2	do	1875
1876	Two stalks to a foot (extra phosphate) *h i j*	40.16	0.83	6.78	1.08	47.72	3.43	1.3	11.3	1.7	80.0	5.7	do	1876
1877	Four stalks to a foot *h i j*	37.20	0.73	6.27	0.93	51.48	3.39	1.1	10.0	1.4	82.1	5.4	do	1877
1878	Four stalks to a foot (extra phosphate) *h i j*	37.89	0.80	6.23	1.10	50.45	3.53	1.3	10.2	1.8	81.0	5.7	do	1878
1879	Eight stalks to a foot *h i j*	36.12	0.73	5.52	0.97	52.90	3.76	1.1	8.6	1.7	83.2	5.4	do	1879
	All analyses, excluding No. 1871. Maximum	57.53	1.20	8.56	1.10	54.06	3.94	2.2	12.8	2.1	83.2	5.7		
	Minimum	31.21	0.73	5.44	0.89	33.46	1.77	1.1	8.6	1.4	78.6	4.3		
	Average	**38.93**	**0.89**	**6.83**	**1.02**	**48.99**	**3.34**	**1.5**	**11.1**	**2.0**	**80.0**	**5.4**		
	Corn (maize) kernels, field-cured, flint varieties:													
	Variety unknown, raised with—													
1880	No fertilizer *h i j*	27.42	1.38	9.07	1.37	56.91	3.85	1.9	12.5	1.9	78.4	5.3	Storrs School Ex. Sta. Rep., 1889, p. 149.	1880
1881	Nitrate of soda *h i j*	30.80	1.32	8.86	1.59	53.91	3.52	1.9	12.8	2.3	77.9	5.1	do	1881
1882	Dissolved boneblack *h i j*	29.22	1.41	9.42	1.49	54.73	3.75	2.0	13.3	2.1	77.3	5.3	do	1882
1883	Muriate of potash *h i j*	28.35	1.36	7.31	1.29	57.68	4.01	1.9	10.2	1.8	80.5	5.6	do	1883
1884	Nitrate of soda, dissolved boneblack *h i j*	28.93	1.42	8.81	1.14	54.80	4.90	2.0	12.4	1.6	77.1	6.9	do	1884
1885	Nitrate of soda, muriate of potash *h i j*	27.96	1.51	7.49	1.37	57.13	4.54	2.1	10.4	1.9	79.3	6.3	do	1885
1886	Dissolved boneblack, muriate of potash (mixed minerals) *h i j*	27.19	1.31	7.06	1.24	58.62	4.58	1.8	9.7	1.7	80.5	6.3	do	1886
	Mixed minerals as in No. 1886—													
1887	nitrate of soda one-third ration *h i j*	26.85	1.53	7.69	1.46	57.20	5.27	2.1	10.5	2.0	78.2	7.2	do	1887
1888	nitrate of soda two-thirds ration *h i j*	27.43	1.52	8.20	1.45	56.25	5.15	2.1	11.3	2.0	77.5	7.1	do	1888
1889	nitrate of soda full ration *h i j*	27.96	1.51	7.13	1.30	57.06	5.04	2.1	9.9	1.8	79.2	7.0	do	1889

* New crop. † Old crop. ‡ Rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Corn (maize) kernels, field-cured, flint varieties—Continued.													
	Variety unknown, raised with—													
	Mixed minerals as in No. 1886—Cont'd.	%	%	%	%	%	%	%	%	%	%	%		
1890	sulphate of ammonia one-third ration *h i j*	26.99	1.31	6.57	1.24	59.14	4.75	1.8	9.0	1.7	81.0	6.5	Storrs School Ex. Sta. Rep., 1889, p. 149.	1890
1891	sulphate of ammonia two-thirds ration *h i j*	28.13	1.29	6.40	1.15	58.14	4.89	1.8	8.9	1.6	80.9	6.8	do	1891
1892	sulphate of ammonia full ration *h i j*	27.78	1.37	8.01	1.30	57.06	4.48	1.9	11.1	1.8	79.0	6.2	do	1892
1893	dried blood one-third ration *h i j*	28.30	1.43	7.02	1.36	56.95	4.94	2.0	9.8	1.9	79.4	6.9	do	1893
1894	dried blood two-thirds ration *h i j*	27.66	1.30	6.58	1.30	58.90	4.26	1.8	9.1	1.8	81.4	5.9	do	1894
1895	dried blood full ration *h i j*	28.04	1.36	6.62	1.36	58.23	4.39	1.9	9.2	1.9	80.9	6.1	do	1895
1896	No fertilizer *h i j*	29.72	1.47	8.01	1.61	54.97	4.22	2.1	11.4	2.3	78.2	6.0	Storrs School Ex. Sta. Rep., 1889, p. 153.	1896
1897	Dissolved boneblack *h i j*	27.62	1.30	7.52	1.52	58.28	3.76	1.8	10.4	2.1	80.5	5.2	do	1897
1898	Muriate of potash *h i j*	29.75	1.20	7.30	1.48	56.83	3.44	1.7	10.4	2.1	80.1	4.9	do	1898
1899	Dissolved boneblack, muriate of potash (mixed minerals) *h i j*	30.06	1.54	7.61	1.54	54.49	4.76	2.2	10.9	2.2	77.9	6.8	do	1899
	Mixed minerals as in No. 1899—													
1900	nitrate of soda one-third ration *h i j*	27.26	1.31	7.64	1.53	58.04	4.22	1.8	10.5	2.1	79.8	5.8	do	1900
1901	nitrate of soda two-thirds ration *h i j*	28.89	1.28	7.82	1.49	56.40	4.12	1.8	11.0	2.1	79.3	5.8	do	1901
1902	nitrate of soda full ration *h i j*	28.85	1.63	7.96	1.62	55.61	4.33	2.3	11.2	2.2	78.2	6.1	do	1902
1903	sulphate of ammonia one-third ration *h i j*	29.72	1.34	7.24	1.69	55.93	4.08	1.9	10.3	2.4	79.6	5.8	do	1903
1904	sulphate of ammonia two-thirds ration *h i j*	28.41	1.36	8.66	1.64	55.71	4.22	1.9	12.1	2.3	77.8	5.9	do	1904
1905	sulphate of ammonia full ration *h i j*	26.92	1.46	8.40	1.54	57.00	4.68	2.0	11.5	2.1	78.0	6.4	do	1905
1906	dried blood one-third ration *h i j*	27.50	1.38	7.32	1.45	58.22	4.13	1.9	10.1	2.0	80.3	5.7	do	1906
1907	dried blood two-thirds ration *h i j*	27.70	1.16	6.94	1.37	59.22	3.61	1.6	9.6	1.9	81.9	5.0	do	1907
1908	dried blood full ration *h i j*	28.98	1.28	7.31	1.49	56.90	4.04	1.8	10.3	2.1	80.1	5.7	do	1908
1909	No fertilizer *h i j*	23.22	1.47	8.52	1.53	61.19	4.07	1.9	11.1	2.0	79.7	5.3	Storrs School Ex. Sta. Rep., 1889, p. 157.	1909
1910	Nitrate of soda *h i j*	22.64	1.62	9.21	1.62	60.42	4.49	2.1	11.9	2.1	78.1	5.8	do	1910
1911	Dissolved boneblack *h i j*	24.39	1.36	8.39	1.59	60.34	3.93	1.8	11.1	2.1	79.8	5.2	do	1911
1912	Muriate of potash *h i j*	24.44	1.36	8.38	1.43	60.46	3.93	1.8	11.1	1.9	80.0	5.2	do	1912
1913	Nitrate of soda, dissolved boneblack *h i j*	22.54	1.39	8.83	1.46	61.91	3.87	1.8	11.4	1.9	79.9	5.0	do	1913
1914	Nitrate of soda, muriate of potash *h i j*	22.75	1.62	9.27	1.55	60.79	4.02	2.1	12.0	2.0	78.7	5.2	do	1914

1915	Dissolved boneblack, muriate of potash *h i j*	23.76	1.37	8.46	1.37	61.46	3.58	1.8	11.1	1.8	80.6	4.7	do	1915
1916	Nitrate of soda, dissolved boneblack, muriate of potash *h i j*	23.11	1.31	8.38	1.38	61.98	3.84	1.7	10.9	1.8	80.6	5.0	do	1916
1917	Plaster	21.98	1.32	8.26	1.32	63.66	3.43	1.7	10.6	1.7	81.6	4.4	do	1917
	Rhode Island White Cap—*													
1918	One stalk in 4 feet *h i j*	26.58	1.15	10.55	0.86	56.78	4.08	1.6	14.4	1.1	77.6	5.3	Conn. State Ex. Sta. Rep., 1889, p. 24	1918
1919	One stalk in 2 feet *h i j*	28.06	0.92	9.61	0.84	56.83	3.74	1.3	13.3	1.1	79.2	5.1	do	1919
1920	One stalk to a foot *h i j*	27.04	1.06	8.57	0.85	58.39	4.09	1.4	11.7	1.2	80.2	5.5	do	1920
1921	Two stalks to a foot *h i j*	29.38	0.86	8.52	0.90	56.31	4.03	1.2	12.0	1.3	79.8	5.7	do	1921
1922	Four stalks to a foot *h i j*	27.27	1.18	5.55	0.81	60.96	4.23	1.6	7.6	1.1	83.9	5.8	do	1922
1923	Eight stalks to a foot (extra fertilizer) *h i j*	32.11	0.62	6.19	0.85	56.38	3.85	0.9	9.0	1.3	83.1	5.7	do	1923
1924	Yellow Flint *c*	23.26	1.38	6.52	0.84	64.39	3.61	1.8	8.5	1.1	83.9	4.7	Mass. State Ex. Sta. Rep., 1889, p. 147	1924
1925	Do. *c*	29.87	1.40	8.13	0.70	56.18	3.72	2.0	11.6	1.0	80.1	5.3	do	1925
1926	Yellow and White Flint *c*	22.36	1.09	10.40	1.09	61.18	3.88	1.4	13.4	1.4	78.8	5.0	do	1926
1927	White Flint *c*	24.98	1.56	9.22	0.96	59.32	3.96	2.1	12.3	1.3	79.0	5.3	do	1927
	Field-cured kernels, flint varieties. Maximum	32.11	1.63	10.55	1.64	64.39	5.27	2.3	14.4	2.4	83.9	7.2		
	Field-cured kernels, flint varieties. Minimum	21.98	0.62	5.55	0.70	53.91	3.43	0.9	7.6	1.0	77.1	4.4		
	Field-cured kernels, flint varieties. Average	**27.09**	**1.34**	**7.97**	**1.32**	**58.10**	**4.18**	**1.7**	**10.9**	**1.8**	**79.8**	**5.8**		
	From small and immature ears:*													
	Rhode Island White Cap—													
1928	One stalk in 4 feet *h i j*	23.95	1.02	10.26	0.76	59.74	4.27	1.4	13.4	1.0	78.6	5.6	Conn. State Ex. Sta. Rep., 1889, p. 24	1928
1929	One stalk in 2 feet *h i j*	27.70	0.94	9.70	0.94	56.87	3.85	1.3	12.6	1.3	79.5	5.3	do	1929
1930	One stalk to a foot *h i j*	30.80	0.96	9.81	0.79	53.67	3.97	1.4	14.1	1.1	77.7	5.7	do	1930
1931	Two stalks to a foot *h i j*	74.80	0.37	3.25	0.30	19.89	1.39	1.5	13.0	1.0	79.0	5.5	do	1931
1932	Four stalks to a foot *h i j*	26.68	1.01	8.52	0.98	58.79	4.02	1.4	11.6	1.5	79.9	5.6	do	1932
1933	Eight stalks to a foot *h i j*	24.94	0.74	7.05	0.77	62.52	3.98	1.0	9.4	1.0	83.2	5.4	do	1933
1934	Eight stalks to a foot (extra fertilizer) *h i j*	32.80	0.70	6.66	0.83	55.53	3.48	1.0	10.0	1.2	82.6	5.2	do	1934
	Maximum	74.80	1.02	10.26	0.98	62.52	4.27	1.5	14.1	1.5	83.2	5.7		
	Minimum	23.95	0.37	3.25	0.30	19.89	1.39	1.0	9.4	1.0	77.7	5.2		
	Average	**34.52**	**0.82**	**7.89**	**0.77**	**52.43**	**3.57**	**1.3**	**11.9**	**1.2**	**80.6**	**5.0**		
	Sorghum:													
1935	Early Amber	10.57	1.81	9.98	1.48	71.58	4.60	2.0	11.2	1.6	80.0	5.2	U. S. Dept. Agr. Rep., 1879, p. 64	1935
1936	Chinese	9.93	1.47	9.54	1.52	73.59	3.95	1.6	10.6	1.7	81.7	4.4	do	1936
1937	Variety unknown	16.76	2.17	7.67	3.21	66.81	3.36	2.6	9.2	3.9	80.3	4.0	Conn. State Ex. Sta. Rep., 1881, p. 82	1937
1938	Minnesota Early Amber, grown in Massachusetts.	15.04	1.73	8.13	1.94	69.65	3.51	2.0	9.6	2.3	82.0	4.1	do	1938
1939	Variety unknown	12.93	1.53	8.69	1.66	71.38	3.81	1.7	19.0	1.9	82.0	4.4	N. J. Ex. Sta. Rep., 1881, p. 52	1939
1940	Do	12.71	1.37	8.06	1.70	72.49	3.67	1.6	9.3	1.9	82.9	4.3	do	1940
1941	Do	12.97	1.38	8.44	1.62	71.70	3.89	1.6	9.6	1.8	82.5	4.5	do	1941
1942	Do	12.50	1.40	8.13	1.71	72.27	3.99	1.6	9.3	1.9	82.6	4.6	do	1942

* Rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Sorghum—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1943	Variety unknown	9.28	3.34	11.25	2.06	71.95	2.12	3.6	12.4	2.2	79.5	2.3	N. J. Ex. Sta. Rep., 1881, p. 52	1943
1944	Chicken corn (*Sorghum vulgare*)	44.87	4.30	16.62	8.70	58.95	2.65	5.1	12.4	10.3	69.0	3.2	Miss. Ex. Sta Bul. 8, 1890	1944
	All analyses, excluding No. 1944. Maximum	16.76	4.30	11.25	8.70	73.59	4.60	5.1	12.4	10.3	82.9	5.2		
	Minimum	9.28	1.37	7.67	1.48	58.95	2.12	1.6	9.3	1.6	69.0	2.3		
	Average	**12.75**	**2.05**	**9.05**	**2.56**	**70.04**	**3.55**	**2.4**	**10.4**	**3.0**	**80.1**	**4.1**		
1945	Broom corn *b*	8.88	4.88	10.09	73.38		2.57	4.9	11.7	80.5		2.9	N. J. Ex. Sta. Rep., 1885, p. 166	1945
1946	Do	14.10	1.98	9.62	7.13	63.64	3.52	2.3	11.2	8.3	74.1	4.1	Mass. State Ex. Sta. Rep., 1887, p. 100	1946
1947	Brown dhoura	7.62	1.68	9.01	1.52	75.99	4.18	1.8	9.8	1.6	82.3	4.5	U. S. Dept. Agr. Rep., 1879, p. 101	1947
1948	Do	12.61	1.63	11.45		74.31		1.8	13.1		85.1		Univ. Tenn. experimental work of Agr. Dept., 1881, p. 163.	1948
1949	Do	12.74	1.42	10.46		75.38		1.6	12.0		86.4		do	1949
1950	Chinese corn	7.87	1.46	9.63	1.79	75.50	3.75	1.6	10.5	2.9	81.8	4.1	U. S. Dept. Agr. Rep., 1879, p. 101	1950
	Oats:													
1951	Variety unknown, raised in Connecticut	12.36	3.03	8.00	12.89	59.02	4.70	3.5	9.1	14.7	67.3	5.4	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27.	1951
1952	Variety unknown, raised in Connecticut	9.40	2.80	10.06	9.67	62.30	5.77	3.1	11.1	10.6	68.8	6.4	U. S. Census, 1880, vol. III, p. 415	1952
1953	Do	9.27	2.92	9.47	10.11	62.68	5.55	3.2	10.4	11.2	69.1	6.1	do	1953
1954	Do	10.72	2.60	9.19	8.88	63.15	5.46	2.9	10.3	9.9	70.8	6.1	do	1954
1955	Do	10.30	2.97	9.25	9.87	62.31	5.30	3.3	10.3	11.0	69.5	5.9	do	1955
1956	Do	10.86	3.06	9.88	8.94	61.88	5.38	3.4	11.1	10.0	69.4	6.1	do	1956
1957	Do	13.48	3.46	9.38	9.28	59.52	4.88	4.0	10.9	10.8	68.6	5.7	Conn. State Ex. Sta. Rep., 1881, p. 83.	1957
	Average, varieties raised in Connecticut.	**10.94**	**2.95**	**9.32**	**9.95**	**61.55**	**5.29**	**3.4**	**10.5**	**11.2**	**69.0**	**5.9**		
1958	White, raised in Dakota	11.94	3.55	13.00	7.64	58.38	5.49	4.0	14.8	8.7	66.3	6.2	U. S. Census, 1889, vol. III, p. 415	1958
1959	Do	11.55	3.25	12.06	7.23	60.20	5.71	3.7	13.6	8.2	68.0	6.5	do	1959
1960	No. 1. White, raised in Illinois	11.23	2.91	11.54	12.18	57.08	5.06	3.3	13.0	13.7	64.3	5.7	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27.	1960
1961	Bedford, raised in Massachusetts	9.81	3.36	12.13	9.37	60.92	4.41	3.7	10.4	10.4	67.6	4.9	U. S. Census, 1880, vol. III, p. 415	1961
1962	Variety unknown, raised in Michigan	12.04	3.20	10.69	8.71	61.04	4.32	3.6	12.2	9.9	69.4	4.9	do	1962

1963	Chinese Hullless, raised in Minnesota	10.57	2.01	14.10	1.47	66.89	4.96	2.2	15.8	1.6	74.9	5.5	do	1963
1964	Variety unknown, raised in New Hampshire	10.77	3.15	11.56	9.66	60.47	4.39	3.5	18.0	10.8	67.8	4.9	do	1964
1965	State, raised in New York	11.03	2.88	10.28	8.76	61.80	5.25	3.2	11.6	9.8	69.5	5.9	do	1965
1966	White State, raised in New York	10.72	3.00	11.31	8.77	61.26	4.94	3.4	12.7	9.8	68.6	5.5	do	1966
1967	Variety unknown	10.56	2.92	13.22	7.37	61.06	4.87	3.3	14.8	8.2	68.3	5.4	do	1967
1968	Schoenen, raised in New York	9.16	2.36	14.40	10.31	50.09	4.68	2.6	15.9	11.4	64.9	5.2	do	1968
1969	Probeteier, raised in New York	9.72	2.91	13.06	8.10	61.44	4.77	3.2	14.5	9.0	68.0	5.3	do	1969
1970	White Probsteier, raised in New York	8.91	3.22	13.69	9.44	60.65	4.09	3.5	15.0	10.4	66.6	4.5	do	1970
1971	Long Island, raised in New York	10.31	2.82	11.34	10.79	60.26	4.48	3.1	12.6	12.0	67.3	5.0	do	1971
	Average, varieties raised in New York.	**10.06**	**2.89**	**12.47**	**9.08**	**60.78**	**4.72**	**3.2**	**13.9**	**10.1**	**67.6**	**5.2**		
1972	Variety unknown, raised in Wisconsin	12.77	3.06	12.34	10.31	58.15	3.37	3.5	14.2	11.8	66.6	3.9	Wis. Ex. Sta. Rep., 1886, p. 95	1972
1973	Do	12.60	2.89	12.54	10.50	56.85	4.62	3.3	14.3	12.0	65.1	5.3	do	1973
1974	Heavy, locality not given *b*	11.47	3.97	10.88	68.08		5.60	4.5	12.2	77.0		6.3	N. J. Ex. Sta. Rep., 1885, p. 172	1974
1975	Do. *b*	10.68	2.69	12.56	68.46		5.01	3.0	14.0	76.7		6.3	do	1975
1976	Do. *b*	10.72	3.56	11.19	69.63		4.90	4.0	12.5	78.0		5.5	do	1976
1977	Light, locality not given *b*	11.17	3.81	10.69	68.36		5.97	4.3	12.0	76.9		6.8	do	1977
1978	Do. *b*	11.48	2.80	12.06	68.78		4.88	3.2	13.7	77.6		5.5	do	1978
1979	Do. *b*	11.06	3.25	9.00	71.72		4.97	3.7	10.1	80.6		5.6	do	1979
1980	White, locality not given *b*	11.52	3.54	12.88	67.48		4.57	4.0	14.5	76.3		5.2	do	1980
1981	Yellow, locality not given *b*	11.27	3.26	11.63	68.99		4.85	3.7	13.0	77.8		5.5	do	1981
1982	Mixed No. 2, locality not given, 34 pounds in a bushel.	11.59	3.15	14.25	7.78	58.12	5.12	3.6	16.1	8.8	65.7	5.8	Conn. State Ex. Sta. Rep., 1888, p. 151	1982
1983	White No. 2, locality not given, 32 pounds in a bushel.	11.28	3.59	12.43	9.77	57.69	5.24	4.1	13.9	11.1	65.0	5.9	do	1983
1984	Variety unknown *a b*	11.11	2.81	14.44	12.40	54.28	4.96	3.2	16.2	14.0	61.0	5.6	N. Y. State Ex. Sta. Rep., 1888, p. 238	1984
1985	Do. *a b*	11.86	2.81	13.44	11.50	55.03	5.36	3.2	15.2	13.1	62.4	6.1	do	1985
1986	Do. *a*	12.07	2.89	13.41	12.76	53.53	5.34	3.3	15.2	14.5	60.9	6.1	do	1986
1987	Do. *a b*	11.36	3.22	11.19	12.76	55.88	5.59	3.6	13.7	14.4	62.0	6.3	do	1987
	All complete analyses of oats. Maximum	13.48	3.59	14.44	12.89	66.89	5.77	4.1	16.2	14.7	74.9	6.5		
	Minimum	8.91	2.01	8.00	1.47	53.53	3.37	2.2	9.1	1.6	60.9	3.9		
	Average	**10.98**	**2.98**	**11.80**	**9.54**	**59.74**	**4.96**	**3.4**	**13.2**	**10.8**	**67.0**	**5.6**		
	Barley:													
1988	Nepaul, raised in California †	8.68	1.87	12.07	1.40	73.91	2.07	2.0	13.2	1.6	81.0	2.2	U. S. Dept. Agr. Rep., 1878, p. 148	1988
1989	Nepaul (bald), raised in California	11.20	1.82	11.64	1.28	72.37	1.69	2.1	13.1	1.4	81.5	1.9	U. S. Census, 1880, vol. III, p. 421	1989
1990	Do	7.23	1.94	13.17	1.55	72.96	3.15	2.1	14.2	1.7	78.6	3.4	U. S. Dept. Agr. Rep., 1878, p. 148	1990
1991	Four-rowed, raised in Canada	12.05	2.51	10.62	3.31	69.83	1.68	2.9	12.1	3.8	79.3	1.9	U. S. Census, 1880, vol. III, p. 421	1991
1992	Variety unknown, raised in Dakota	12.57	2.43	12.57	3.66	66.97	1.80	2.8	14.4	4.2	76.5	2.1	do	1992
1993	Two-rowed, raised in Massachusetts	11.87	2.99	8.59	4.17	70.90	1.48	3.4	9.7	4.7	80.5	1.7	do	1993
1994	Variety unknown, raised in New Hampshire	10.32	2.68	12.25	4.21	68.98	1.62	3.0	13.6	4.7	76.9	1.8	do	1994
1995	Pueblo (bald), raised in New Mexico	11.12	1.86	15.73	1.40	67.98	1.91	2.1	17.7	1.6	76.5	2.1	do	1995

* 30 bushels per acre.

† *In loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Barley—Continued.	%	%	%	%	%	%	%	%	%	%	%		
1996	Four-rowed, raised in New York	12.43	2.81	12.75	3.15	67.29	1.57	3.2	14.6	3.6	76.8	1.8	U. S. Census, 1880, vol. III, p. 421	1996
1997	Two-rowed, raised in New York	11.00	3.17	14.37	3.25	66.72	1.49	3.6	16.1	3.7	74.9	1.7	do	1997
	All analyses: Maximum	12.57	3.17	15.73	4.21	73.91	3.15	3.6	17.7	4.7	81.5	3.4		
	All analyses: Minimum	7.23	1.82	8.59	1.28	66.72	1.48	2.1	9.7	1.4	74.9	1.7		
	All analyses: Average	**10.85**	**2.41**	**12.37**	**2.74**	**69.79**	**1.84**	**2.7**	**13.9**	**3.0**	**78.4**	**2.0**		
	Rye:													
1998	White Winter	8.68	1.87	12.07	1.40	73.91	2.07	2.0	13.2	1.5	81.0	2.3	U. S. Dept. Agr. Rep., 1878, p. 148	1998
1999	Variety unknown	12.58	1.87	9.75	1.50	72.91	1.39	2.1	11.2	1.7	83.4	1.6	U. S. Census, 1880, vol. III, p. 415	1999
2000	Spring	12.72	1.94	9.50	1.90	72.33	1.61	2.2	10.9	2.2	82.9	1.8	do	2000
2001	Variety unknown	11.71	1.87	11.69	2.06	71.21	1.46	2.1	13.2	2.3	80.7	1.7	do	2001
2002	Black	13.17	1.75	10.29	1.50	71.76	1.53	2.0	11.8	1.7	82.7	1.8	do	2002
2003	Variety unknown	10.69	1.90	10.19	1.67	73.67	1.88	2.1	11.4	1.9	82.5	2.1	N. J. Ex. Sta. Rep., 1881, p. 52	2003
2004	Do. *b*	9.15	1.77	0.06	78.36		1.66	2.0	9.9	86.2		1.9	N. J. Ex. Sta. Rep., 1885, p. 170	2004
	All complete analyses: Maximum	13.17	1.94	12.07	2.06	73.91	2.07	2.2	13.2	2.3	83.4	2.3		
	All complete analyses: Minimum	8.68	1.75	9.50	1.40	71.21	1.39	2.0	10.9	1.5	80.7	1.6		
	All complete analyses: Average	**11.59**	**1.86**	**10.58**	**1.67**	**72.64**	**1.66**	**2.1**	**11.9**	**1.9**	**82.2**	**1.9**		
	Wheat, spring varieties:													
2005	Improved Fife, raised in Canada*	8.50	1.47	14.70	1.62	71.15	2.56	1.6	16.1	1.8	77.7	2.8	U. S. Dept. Agr. Rep., 1878, p. 148	2005
2006	Hedge Row, raised in Colorado	9.17	2.59	12.94	1.33	71.88	2.09	2.8	14.2	1.5	79.2	2.3	U. S. Dept. Agr. Rep., 1883, p. 206	2006
2007	Scotch Fife, raised in Dakota	12.60	1.98	13.50	2.01	68.09	1.82	2.3	15.5	2.3	77.8	2.1	U. S. Census, 1880, vol. III, p. 415	2007
2008	Do	12.90	1.77	13.25	1.93	68.33	1.82	2.0	15.2	2.2	78.5	2.1	do	2008
2009	Do	10.08	1.80	14.35	1.83	69.69	2.25	2.0	16.0	2.0	77.5	2.5	U. S. Dept. Agr. Rep., 1883, p. 204	2009
2010	Variety unknown, raised in Georgia	10.92	1.80	11.20	2.13	71.55	2.40	2.0	12.6	2.4	80.3	2.7	U. S. Dept. Agr. Rep., 1883, p. 201	2010
2011	Amber Bearded, raised in Maine	13.35	1.79	11.81	1.99	69.06	2.00	2.1	13.6	2.3	79.7	2.3	U. S. Census, 1880, vol. III, p. 415	2011
2012	Variety unknown, raised in Minnesota	11.13	1.95	14.00		72.92		2.2	15.8		82.0		Mich. Bd. Agr., 1877, p. 350	2012
2013	Champlain, raised in New York*	8.79	2.05	15.40	1.49	69.72	2.55	2.2	16.9	1.6	76.5	2.8	U. S. Dept. Agr. Rep., 1878, p. 148	2013
2014	Defiance, raised in New York*	8.12	1.57	14.00	2.04	71.78	2.49	1.7	15.2	2.2	78.2	2.7	do	2014

2015	Chili Club, raised in Oregon*	7.90	1.56	8.14	1.41	78.06	2.33	1.7	8.8	1.5	85.5	2.5	do	2015
2016	Noah Island, raised in Orogon*	9.64	2.00	9.80	1.92	74.58	2.06	2.2	10.8	2.1	82.6	2.3	do	2016
2017	Clawson, raised in Oregon	12.99	1.77	10.50		74.74		2.0	12.1		85.0		U. S. Dept. Agr. Rep., 1883, p. 198	2017
2018	Red Chaff, raised in Oregon	10.68	2.20	8.40	1.65	74.91	2.16	2.5	9.4	1.8	83.9	2.4	U. S. Dept. Agr. Rep., 1883, p. 207	2018
2019	Red Mammoth, raised in Wisconsin	12.13	2.30	15.13	2.30	66.07	2.07	2.6	17.2	2.6	75.2	2.4	U. S. Census, vol. III, p. 415	2019
	All complete analyses. Maximum	13.35	2.59	15.40	2.30	78.66	2.56	2.8	17.2	2.6	85.5	2.8		
	All complete analyses. Minimum	8.12	1.47	8.14	1.33	66.07	1.82	1.6	8.8	1.5	75.2	2.1		
	All complete analyses. Average	**10.35**	**1.91**	**12.51**	**1.82**	**71.21**	**2.20**	**2.1**	**13.9**	**2.0**	**79.5**	**2.5**		
	Wheat, winter varieties:													
2020	Lancaster Red, raised in Alabama	11.18	2.37	12.60	1.51	70.70	1.64	2.7	14.2	1.7	79.6	1.8	U. S. Dept. Agr. Rep., 1883, p. 202	2020
2021	Smooth Mediterranean, raised in Alabama	10.42	2.01	11.38	1.61	72.24	2.30	2.3	12.7	1.8	80.6	2.6	do	2021
2022	Tuscan Island, raised in Alabama	10.52	2.03	10.85	1.51	72.40	2.69	2.3	12.2	1.7	80.8	3.0	do	2022
2023	Rogers Red, raised in Alabama	9.36	2.17	10.85	1.88	73.24	2.50	2.4	12.0	2.0	80.8	2.8	do	2023
2024	Dot, raised in Alabama	10.21	2.18	10.85	1.54	72.85	2.37	2.5	12.1	1.7	81.0	2.7	do	2024
2025	Clawson, raised in Alabama	9.81	2.09	9.98	1.81	74.37	1.94	2.3	11.1	2.0	82.5	2.1	do	2025
2026	Rice, raised in Alabama	10.78	2.02	11.55	1.56	71.67	2.42	2.2	12.9	1.8	80.4	2.7	do	2026
2027	Bill Dallas, raised in Alabama	11.03	1.77	10.15	1.32	73.72	2.01	2.0	11.4	1.5	82.9	2.2	do	2027
2028	Tennessee Amber, raised in Alabama	10.84	1.96	11.03	1.53	72.57	2.07	2.2	12.3	1.7	81.5	2.3	do	2028
2029	Emporium, raised in Alabama	11.02	1.91	11.90	1.60	70.93	2.04	2.1	13.4	1.8	80.4	2.3	do	2029
2030	Lovell New, raised in Alabama	11.57	2.19	9.80	1.74	72.42	2.28	2.5	11.1	1.9	81.9	2.6	do	2030
2031	Washington Glass, raised in Alabama	10.84	2.12	9.80	1.80	73.02	2.42	2.5	11.0	2.0	81.8	2.7	do	2031
2032	Eureka, raised in Alabama	11.43	1.96	11.38	1.65	71.49	2.09	2.3	12.8	1.8	80.7	2.4	do	2032
2033	Purple Straw, raised in Alabama	12.12	1.94	12.78	1.77	68.99	2.40	2.1	14.5	2.0	78.7	2.7	do	2033
2034	Kilpatrick Rust-Proof, raised in Alabama	12.36	1.88	12.25	1.49	69.89	2.13	2.2	14.0	1.7	79.7	2.4	do	2034
2035	Hughes Rust-Proof, raised in Alabama	12.18	1.90	13.65	1.68	68.52	2.07	2.2	15.5	1.9	78.0	2.4	do	2035
2036	Red Mediterranean, raised in Alabama	9.68	2.01	12.25	1.55	72.29	2.22	2.2	13.6	1.8	80.0	2.4	do	2036
	Varieties raised in Alabama. Maximum	12.36	2.37	13.65	1.88	74.37	2.69	2.7	15.5	2.0	82.9	3.0		
	Varieties raised in Alabama. Minimum	9.36	1.77	9.80	1.32	68.52	1.64	2.0	11.0	1.5	78.0	1.8		
	Varieties raised in Alabama. Average	**10.94**	**2.03**	**11.36**	**1.62**	**71.84**	**2.21**	**2.2**	**12.8**	**1.8**	**80.7**	**2.5**		
2037	Soules, raised in British Columbia	8.51	1.63	12.25		77.61		1.8	13.4		84.8		Mich. Bd. Agr. Rep., 1877, p. 350	2037
2038	Do	11.22	2.09	11.88		74.81		2.4	13.3		84.3		do	2038
2039	Do	10.07	1.89	13.45		74.59		2.1	15.0		82.9		do	2039
2040	Macaroni, raised in California	10.70	1.97	13.76	1.90	70.21	1.46	2.2	15.4	2.1	78.6	1.7	U. S. Census, 1880, vol. III, p. 415	2040
2041	Do	10.93	1.45	12.84	1.75	71.40	1.63	1.6	14.4	2.0	80.2	1.8	do	2041
2042	White Club, raised in California	11.23	1.93	8.25	2.14	74.78	1.67	2.2	9.3	2.4	84.2	1.9	do	2042
2043	No. 1 San Francisco Produce Exchange, raised in California.	11.03	1.78	9.09	2.15	73.58	1.77	2.0	10.9	2.4	82.7	2.0	do	2043
	Average, varieties raised in California.	**10.97**	**1.78**	**11.14**	**1.98**	**72.49**	**1.64**	**2.0**	**12.5**	**2.2**	**81.5**	**1.8**		

* In *loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Wheat, winter varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2044	Victor, raised in Canada*	7.49	1.39	9.45	1.69	77.71	2.27	1.5	10.2	1.8	84.0	2.5	U. S. Dept. Agr. Rep., 1878, p. 147	2044
2045	Silver Chaff, raised in Canada*	8.93	1.58	9.89	1.75	75.41	2.44	1.7	10.9	1.9	82.8	2.7	do	2045
2046	Do	11.05	1.90	9.80	1.70	73.27	2.28	2.1	11.0	1.9	82.4	2.6	U. S. Dept. Agr. Rep., 1883, p. 200	2046
2047	Midge-Proof, raised in Canada	11.60	1.45	9.80	1.68	73.43	2.04	1.7	11.1	1.9	82.9	2.4	do	2047
2048	Arnold Victor, raised in Canada	10.90	1.00	11.55	1.58	72.23	2.14	1.8	13.0	1.8	81.0	2.4	do	2048
	Average, varieties raised in Canada	**9.99**	**1.58**	**10.10**	**1.68**	**74.42**	**2.23**	**1.8**	**11.2**	**1.9**	**82.7**	**2.4**		
2049	Hybrid No. 10, raised in Colorado	9.72	2.28	13.75	1.32	70.77	2.16	2.5	15.2	1.4	78.6	2.3	U. S. Dept. Agr. Rep., 1883, p. 205	2049
2050	Hybrid No. 15, raised in Colorado	10.07	1.93	12.25	1.57	71.50	2.68	2.1	13.7	1.8	79.4	3.0	do	2050
2051	Hybrid No. 16, raised in Colorado	9.53	2.04	11.75	1.62	72.52	2.54	2.2	13.0	1.8	80.2	2.8	do	2051
2052	Hybrid No. 17, raised in Colorado	9.93	2.07	13.62	1.59	62.86	3.03	2.3	15.0	1.8	76.6	4.3	do	2052
2053	Hybrid No. 18, raised in Colorado	9.74	2.19	12.94	1.60	71.95	1.58	2.4	14.3	1.8	79.7	1.8	do	2053
2054	Hybrid No. 19, raised in Colorado	10.45	2.54	12.44	1.79	70.59	2.19	2.8	13.9	2.0	78.8	2.5	U. S. Dept. Agr. Rep., 1883, p. 206	2054
2055	Hybrid No. 20, raised in Colorado	10.57	3.57	12.25	1.67	69.62	2.32	4.0	13.7	1.9	77.8	2.6	do	2055
2056	New South Wales seed, raised in Colorado	9.47	2.18	12.62	1.55	71.78	2.40	2.4	13.9	1.7	79.3	2.7	do	2056
2057	Centennial, raised in Colorado	9.66	2.35	12.06	1.10	72.83	2.00	2.7	13.4	1.2	80.5	2.2	do	2057
5058	El Dorado, raised in Colorado	10.55	2.24	11.73	1.10	71.93	2.43	2.5	13.0	1.2	80.6	2.7	do	2058
2059	White Mexican, raised in Colorado	9.91	2.60	13.81	1.52	70.27	1.80	2.9	15.3	1.7	78.0	2.1	do	2059
2060	Judkin, raised in Colorado	9.75	2.57	12.25	1.70	71.31	2.42	2.0	13.6	1.9	78.9	2.7	do	2060
2061	Australian, raised in Colorado	9.78	1.85	11.19	1.45	73.50	2.23	2.1	12.4	1.7	81.4	2.4	do	2061
2062	Fountain, raised in Colorado	10.58	2.70	13.62	1.32	69.03	2.15	3.0	15.2	1.5	77.9	2.4	do	2062
2063	Perfection, raised in Colorado	9.93	1.99	14.18	1.55	70.03	2.32	2.2	15.7	1.7	77.8	2.6	do	2063
2064	Russian, raised in Colorado	9.55	1.99	14.49	1.49	69.86	2.62	2.2	16.0	1.6	77.3	2.9	do	2064
2065	Rio Grande, raised in Colorado	9.51	2.08	14.69	1.79	68.97	2.96	2.3	16.2	2.0	76.2	3.3	do	2065
2066	Touselle, raised in Colorado	10.23	2.10	13.50	1.65	70.17	2.35	2.3	15.0	1.9	78.1	2.7	do	2066
2067	German Fife, raised in Colorado	10.42	2.31	15.06	1.48	67.94	2.79	2.6	16.9	1.7	75.7	3.1	do	2067
2068	Oregon Club, raised in Colorado	9.59	1.91	12.25	1.60	72.46	2.19	2.1	13.6	1.8	80.1	2.4	do	2068
2069	Sonoro, raised in Colorado	10.17	2.02	14.18	1.40	70.10	2.13	2.2	15.8	1.6	78.0	2.4	do	2069
2070	Imperial Fife, raised in Colorado	9.48	2.64	15.94	1.63	68.00	2.31	2.9	17.7	1.8	75.1	2.5	do	2070
2071	Lost Nation, raised in Colorado	10.24	2.17	12.93	1.74	69.93	2.99	2.4	14.4	1.9	78.0	3.3	do	2071
2072	Pringle No. 6, raised in Colorado	9.89	2.13	13.13	1.70	70.63	2.52	2.3	14.5	1.9	78.5	2.8	do	2072
2073	Pringle No. 7, raised in Colorado	9.89	2.23	15.25	1.78	68.65	2.20	2.4	16.9	2.0	76.2	2.5	do	2073
2074	Clawson, raised in Colorado	10.14	1.94	11.75	1.60	72.26	2.31	2.1	13.0	1.8	80.5	2.6	do	2074
2075	Hedge Row, raised in Colorado	9.07	2.08	13.62	1.62	71.50	2.11	2.3	14.9	1.8	78.7	2.3	do	2075

2076	White Chaff, raised in Colorado	9.57	2.13	14.04	2.18	69.64	2.44	2.3	15.5	2.4	77.1	2.7	do	2076
2077	Triticum, raised in Colorado	10.02	2.67	13.62	1.51	69.52	2.65	3.0	15.0	1.7	77.3	3.0	do	2077
2078	Durum Russia, raised in Colorado	9.91	2.32	15.25	1.54	68.98	2.00	2.6	17.0	1.7	76.5	2.2	do	2078
2079	Doty, raised in Colorado	9.41	2.35	14.00	1.80	69.94	2.50	2.6	15.5	2.0	77.1	2.8	do	2079
2080	Meekins, raised in Colorado	9.38	2.53	15.15	1.59	68.38	2.97	2.8	10.7	1.7	75.5	3.3	do	2080
2081	Mottheo Red, raised in Colorado	7.85	1.85	14.00	1.80	72.53	1.97	2.0	15.2	2.0	78.7	2.1	do	2081
2082	Finlay, raised in Colorado	9.30	1.85	12.60	1.73	72.16	2.36	2.0	13.9	1.9	79.6	2.6	do	2082
2083	Champion Amber, raised in Colorado	8.20	2.20	11.90	1.55	73.68	2.47	2.4	13.0	1.7	80.2	2.7	do	2083
2084	Dallas, raised in Colorado	10.05	1.85	14.53	1.73	69.38	2.40	2.1	16.2	1.9	77.1	2.7	do	2084
2085	Bennett, raised in Colorado	7.85	2.20	13.65	2.05	71.67	2.58	2.4	14.8	2.2	77.8	2.8	do	2085
2086	Lemon, raised in Colorado	8.45	2.05	12.43	1.68	72.25	2.14	2.2	13.6	1.8	80.1	2.3	do	2086
2087	Gold Medal, raised in Colorado	9.25	1.80	12.25	1.73	72.71	2.26	2.0	13.5	1.9	80.1	2.5	do	2087
2088	German Amber, raised in Colorado	8.80	1.80	12.43	1.75	72.80	2.42	2.0	13.6	1.9	79.8	2.7	do	2088
2089	Rice, raised in Colorado	8.50	2.10	14.18	1.97	70.86	2.39	2.3	15.5	2.2	77.4	2.6	do	2089
2090	Washington Glass, raised in Colorado	8.60	1.95	11.55	1.18	74.31	2.41	2.1	12.6	1.3	81.3	2.7	do	2090
2091	Swamp, raised in Colorado	10.15	2.05	14.35	1.85	69.31	2.29	2.3	16.0	2.1	77.1	2.5	U. S. Dept. Agr. Rep., 1883, p. 207	2091
2092	Wyeor, raised in Colorado	8.55	2.25	12.60	2.13	72.27	2.20	2.5	13.8	2.3	79.0	2.4	do	2092
	Varieties raised in Colorado. Maximum	10.57	3.57	15.94	2.18	74.31	3.03	4.0	17.7	2.4	81.4	4.3		
	Varieties raised in Colorado. Minimum	7.85	1.80	11.19	1.10	62.86	1.58	2.0	12.4	1.3	75.1	1.8		
	Varieties raised in Colorado. Average	**9.58**	**2.20**	**13.31**	**1.63**	**70.89**	**2.39**	**2.4**	**14.7**	**1.9**	**78.3**	**2.7**		
2093	Castle Fife, raised in Dakota	10.98	2.20	10.68	1.83	72.20	2.11	2.5	12.0	2.0	81.1	2.4	U. S. Dept. Agr. Rep., 1883, p. 204	2093
2094	Dallas, raised in Georgia	7.95	2.15	12.60	1.65	73.17	2.48	2.3	13.7	1.8	79.5	2.7	U. S. Dept. Agr. Rep., 1883, p. 201	2094
2095	Bennett, raised in Georgia	8.05	2.05	14.00	1.38	72.30	2.22	2.2	15.2	1.5	78.7	2.4	do	2095
2096	Italian White, raised in Georgia	11.22	1.70	9.45	1.48	73.47	2.68	1.9	10.6	1.7	82.8	3.0	do	2096
2097	Purple Straw, raised in Georgia	10.49	2.30	10.15	1.48	73.46	2.12	2.6	11.3	1.6	82.1	2.4	do	2097
2098	Red Mediterranean, raised in Georgia	9.19	2.04	12.43	2.03	72.18	2.13	2.2	13.7	2.2	79.5	2.4	do	2098
2099	Do	12.20	1.66	12.60	1.88	69.57	2.09	1.9	14.5	2.1	79.1	2.4	do	2099
2100	Do	9.83	1.70	10.85	1.68	73.73	2.21	1.9	12.1	1.9	81.7	2.4	U. S. Dept. Agr. Bul. 1, 1883, p. 19	2100
2101	Do	9.88	1.62	10.85	1.79	73.80	2.06	1.8	12.1	2.0	81.9	2.2	do	2101
	Varieties raised in Georgia. Maximum	12.20	2.30	14.00	2.03	73.80	2.68	2.6	15.2	2.2	82.8	3.0		
	Varieties raised in Georgia. Minimum	7.95	1.62	9.45	1.38	69.57	2.06	1.8	10.6	1.5	78.7	2.2		
	Varieties raised in Georgia. Average	**9.85**	**1.90**	**11.62**	**1.67**	**72.71**	**2.25**	**2.1**	**12.8**	**1.9**	**80.7**	**2.5**		
2102	Osterey, raised in Indiana	10.16	2.05	10.85	2.02	73.41	1.51	2.3	12.1	2.2	81.8	1.6	U. S. Dept. Agr. Rep., 1883, p. 202	2102
2103	Fultz, raised in Kentucky	10.55	1.40	11.90	1.98	71.87	2.30	1.6	13.3	2.2	80.3	2.6	U. S. Dept. Agr. Rep., 1883, p. 204	2103
2104	Rice, raised in Kentucky	10.53	1.79	14.53	1.61	69.55	1.99	2.0	16.2	1.8	77.8	2.2	do	2104
2105	Do	10.96	1.52	14.00	1.69	69.89	1.94	1.8	15.7	1.9	78.4	2.2	do	2105
2106	Fultz, raised in Kentucky	12.44	1.76	12.78	1.71	69.44	1.87	2.0	14.6	1.9	79.4	2.1	do	2106
2107	Odessa, raised in Kentucky	10.68	1.76	11.90	2.27	71.75	1.64	2.0	13.3	2.5	80.4	1.8	do	2107
2108	German Amber, raised in Kentucky	9.86	1.78	14.18	2.44	69.95	1.79	2.0	15.7	2.8	77.5	2.0	do	2108

* In *loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Wheat, winter varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2109	White, raised in Kentucky	9.94	2.07	12.78	2.34	71.22	1.65	2.3	14.2	2.6	79.1	1.8	U. S. Dept. Agr. Rep., 1883, p. 204	2109
2110	Fultz, raised in Kentucky	11.68	1.88	13.13	2.25	69.26	1.80	2.1	14.9	2.5	78.4	2.1	do	2110
	Varieties raised in Kentucky. Maximum	12.44	2.07	14.53	2.44	71.87	2.30	2.3	16.2	2.8	80.4	2.6		
	Varieties raised in Kentucky. Minimum	9.86	1.40	11.90	1.61	69.26	1.64	1.6	13.3	1.8	77.5	1.8		
	Varieties raised in Kentucky. Average	**10.83**	**1.75**	**13.15**	**2.03**	**70.57**	**1.87**	**1.9**	**14.6**	**2.2**	**79.2**	**2.1**		
2111	Polish, raised in Maryland	10.08	1.67	12.43	1.56	71.59	2.67	1.8	13.8	1.8	79.6	3.0	U. S. Dept. Agr. Rep., 1878, p. 147	2111
2112	Rico, raised in Maryland*	8.40	2.15	14.53	1.63	70.97	2.32	2.4	15.9	1.7	77.5	2.5	U. S. Dept. Agr. Rep., 1883, p. 201	2112
2113	Fultz, raised in Maryland	11.06	1.85	9.98	1.70	73.43	1.98	2.1	11.3	1.9	82.4	2.3	do	2113
2114	Rice, raised in Maryland	10.00	1.80	12.25	1.86	71.91	2.18	2.0	13.6	2.1	79.9	2.4	do	2114
2115	Centennial Amber, raised in Maryland	11.05	2.05	12.08	1.68	71.03	2.11	2.3	13.6	1.9	79.8	2.4	do	2115
2116	Midge-Proof, raised in Maryland	9.45	1.35	10.85	1.63	74.79	1.93	1.5	12.0	1.8	82.6	2.1	do	2116
2117	Fultz, raised in Maryland	11.34	1.66	9.80	1.72	73.21	2.27	1.9	11.0	1.9	82.6	2.6	do	2117
2118	Do	11.38	1.64	10.85	1.59	72.99	1.55	1.8	12.3	1.8	82.3	1.8	do	2118
2119	White Mediterranean, raised in Maryland	11.92	1.63	12.08	2.30	70.30	1.77	1.8	13.7	2.6	80.0	1.9	do	2119
	Varieties raised in Maryland. Maximum	11.92	2.15	14.53	2.30	74.79	2.67	2.4	15.9	2.6	82.6	3.0		
	Varieties raised in Maryland. Minimum	8.40	1.35	9.80	1.56	70.30	1.55	1.5	11.0	1.7	79.6	1.8		
	Varieties raised in Maryland. Average	**10.52**	**1.76**	**11.65**	**1.74**	**72.25**	**2.08**	**2.0**	**13.0**	**1.9**	**80.8**	**2.3**		
2120	Michigan White, cleaned for grinding, raised in Michigan.	12.75	1.56	11.64	1.83	70.96	1.26	1.8	13.3	2.1	81.4	1.4	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 25.	2120
2121	Diehl, raised in Michigan	9.64	1.72	12.38		76.26		1.9	13.7		84.4		Mich. Bd. Agr. Rep., 1877, p. 350	2121
2122	Do	12.18	1.82	13.78		72.22		2.1	15.6		82.3		do	2122
2123	Do	12.68	1.77	11.81		73.74		2.0	13.5		84.5		do	2123
2124	Do	10.25	1.50	11.88		76.37		1.7	13.2		85.1		do	2124
2125	Soules, raised in Michigan	11.02	1.73	11.81		75.44		1.9	12.8		84.8		do	2125
2126	Lincoln, raised in Michigan	13.38	1.56	11.90		73.16		1.8	13.8		84.4		do	2126
2127	Do	10.78	1.75	11.38		76.09		2.0	12.7		85.3		do	2127
2128	Fultz, raised in Michigan	11.45	1.74	11.59		75.22		2.0	13.1		84.9		do	2128
2129	Do	12.53	1.74	14.47		71.26		2.0	16.5		81.5		do	2129
2130	Treadwell, raised in Michigan	12.69	1.71	12.50		73.10		2.0	14.3		83.7		do	2130
2131	Do	9.94	1.80	11.69		76.57		2.0	13.0		85.0		do	2131
2132	Do	10.00	1.76	11.88		76.36		2.0	13.2		84.8		do	2132
2133	Tappahannock, raised in Michigan	11.21	1.77	13.56		73.46		2.0	15.3		82.7		do	2133

2134	Lancaster, raised in Michigan	11.93	1.82	14.00		72.25		2.1	15.9		82.0		do	2134
2135	Asiatic, raised in Michigan	11.11	1.70	12.25		74.94		1.9	13.8		84.3		do	2135
2136	Gold Medal, raised in Michigan	10.55	1.73	11.15		76.57		1.9	12.5		85.6		do	2136
2137	Do	10.12	2.00	13.06		74.82		2.2	14.5		83.2		do	2137
2138	Egyptian Red, raised in Michigan	11.48	1.69	11.19		75.64		1.9	12.6		85.5		do	2138
2139	Clawson, raised in Michigan	12.29	1.64	11.88		74.19		1.9	13.5		84.6		do	2139
2140	Do	11.30	1.74	10.94		76.02		2.0	12.3		85.7		do	2140
2141	Do	12.29	1.79	11.16		74.76		2.1	12.7		85.2		do	2141
2142	Do	10.36	1.64	11.81		76.19		1.8	13.2		85.0		do	2142
2143	Do	11.19	1.76	12.06		74.99		2.0	13.6		84.4		do	2143
2144	Do	11.09	1.64	12.38		74.89		1.9	13.9		84.2		do	2144
2145	Do	11.08	1.49	12.25		75.18		1.7	13.8		84.5		do	2145
2146	Do	10.43	1.70	12.69		75.18		1.9	14.2		83.9		do	2146
2147	Do	10.31	1.60	12.25		75.84		1.8	13.7		84.6		do	2147
2148	Do	13.00	1.79	11.37		73.84		2.1	13.1		84.8		do	2148
2149	Weeks, raised in Michigan	10.03	1.59	11.00		77.38		2.0	12.1		85.9		do	2149
2150	Powers, raised in Michigan	10.85	1.70	12.03		75.42		1.9	13.5		84.6		do	2150
2151	Armstrong, raised in Michigan	12.21	1.97	12.88		72.94		2.2	14.7		83.1		do	2151
2152	Tuecan, raised in Michigan	13.77	1.72	11.37		73.14		2.0	13.2		84.8		do	2152
2153	Post, raised in Michigan	10.27	1.58	11.25		76.90		1.8	12.5		85.7		do	2153
2154	No. 1 White, raised in Michigan	12.89	1.85	11.06	1.90	70.74	1.56	2.1	12.7	2.2	81.2	1.8	U. S. Census, vol. III, p. 414	2154
2155	Buckeye, raised in Michigan	12.73	1.38	10.97		74.92		1.6	12.6		85.8		U. S. Dept. Agr. Rep., 1883, p. 198	2155
2156	White Extra, raised in Michigan	9.64	1.72	12.38		76.26		1.9	13.7		84.4		U. S. Dept. Agr. Rep., 1883, p. 202	2156
2157	Silver Chaff, raised in Michigan	10.25	1.00	10.85	1.20	75.00	1.70	1.1	12.3	1.3	83.4	1.9	do	2157
2158	Louisiana, raised in Michigan	10.30	1.60	10.50	1.80	73.73	2.07	1.8	11.7	2.0	82.2	2.3	U. S. Dept. Agr. Rep., 1883, p. 203	2158
2159	Jersey Red, raised in Michigan	9.05	1.70	11.73	2.18	73.17	2.17	1.9	12.8	2.4	80.5	2.4	do	2159
2160	Powers, raised in Michigan	9.70	1.05	10.50	1.05	75.91	1.79	1.2	11.6	1.2	84.0	2.0	do	2160
2161	Dot, raised in Michigan	9.70	1.90	12.43	1.80	71.94	2.23	2.1	13.7	2.0	79.8	2.4	do	2161
2162	Michigan Wick, raised in Michigan	9.65	1.65	10.68	2.05	73.88	2.09	1.9	11.8	2.3	81.7	2.3	do	2162
2163	Schaefer, raised in Michigan	9.35	1.65	11.20	1.88	73.80	2.12	1.9	12.3	2.1	81.4	2.3	do	2163
2164	Lancaster Red, raised in Michigan	11.25	1.80	12.95	1.83	69.96	2.21	2.0	14.7	2.0	78.8	2.5	do	2164
2165	Velvet Chaff, raised in Michigan	11.50	2.05	14.00	1.68	68.60	2.17	2.4	15.8	1.9	77.4	2.5	do	2165
2166	Shumaker, raised in Michigan	11.10	1.35	12.60	1.60	71.38	1.97	1.6	14.1	1.8	80.3	2.2	do	2166
2167	Armstrong, raised in Michigan	10.60	1.70	10.68	2.10	72.62	2.30	1.9	11.9	2.3	81.4	2.5	do	2167
2168	Muskingum, raised in Michigan	11.34	1.40	12.60	1.90	70.59	2.16	1.6	14.1	2.2	79.6	2.5	do	2168
2169	Mediterranean, raised in Michigan	10.90	1.25	15.23	1.23	69.41	1.98	1.4	17.1	1.4	77.9	2.2	do	2160
2170	Red Russian, raised in Michigan	10.40	2.05	12.08	1.78	71.38	2.31	2.3	13.5	2.0	79.6	2.6	do	2170
2171	Diehl, raised in Michigan	10.90	1.75	10.50	1.60	73.11	2.14	2.0	11.7	1.8	82.1	2.4	do	2171
2172	Clawson, raised in Michigan	11.40	1.65	10.68	1.95	72.12	2.20	1.9	12.0	2.3	81.3	2.5	do	2172
2173	Jenninge, raised in Michigan	11.65	1.85	12.25	1.65	70.61	1.99	2.1	13.9	1.9	79.8	2.3	do	2173
2174	Buckeye, raised in Michigan	11.55	1.45	12.43	1.95	70.73	1.89	1.7	14.0	2.2	80.0	2.1	do	2174
2175	Trump, raised in Michigan	10.95	1.70	11.38	2.00	72.02	1.95	1.9	12.7	2.2	81.0	2.2	do	2175
2176	Shumaker, raised in Michigan	10.05	2.08	9.13	2.28	74.01	2.45	2.3	10.2	2.6	82.2	2.7	do	2176
2177	Clawson, raised in Michigan	11.22	1.97	10.69	2.35	71.59	2.18	2.3	12.0	2.6	80.6	2.5	do	2177
	All complete analyses, varieties raised in Michigan. Maximum	13.77	2.08	15.23	2.35	75.91	2.45	2.4	17.1	2.6	84.0	2.7		
	Minimum	9.05	1.00	9.13	1.05	70.59	1.26	1.1	10.2	1.2	77.4	1.9		
	Average	**10.80**	**1.66**	**11.64**	**1.81**	**72.06**	**2.03**	**1.9**	**13.0**	**2.0**	**80.9**	**2.2**		

* *In loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Wheat, winter varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2178	Missouri Red Fall, St. Louis inspection, clean for grinding, raised in Missouri.	13.52	1.55	11.79	1.72	69.95	1.47	1.8	13.6	2.0	80.9	1.7	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 25.	2178
2179	Yellow, raised in Missouri *	7.69	1.91	11.59	1.53	75.17	2.11	2.1	12.6	1.7	81.3	2.3	U. S. Dept. Agr. Rep., 1878, p. 147	2179
2180	Fultz, raised in Missouri	10.28	1.80	10.50	2.28	72.86	2.28	2.0	11.7	2.5	81.3	2.5	U. S. Dept. Agr. Rep., 1883, p. 205	2180
2181	Shumaker, raised in Missouri	8.64	1.99	12.44	2.49	72.11	2.33	2.2	13.6	2.7	78.9	2.6	do	2181
2182	Zimmerman, raised in Missouri	9.18	2.01	11.38	2.57	72.51	2.35	2.2	12.5	2.8	79.9	2.6	do	2182
2183	Clawson, raised in Missouri	9.18	1.91	11.19	2.28	73.28	2.16	2.1	12.3	2.5	80.7	2.4	do	2183
2184	Russian No. 2, raised in Missouri	8.43	2.09	11.00	2.72	73.53	2.23	2.3	12.0	3.0	80.3	2.4	do	2184
2185	Smooth Mediterranean, raised in Missouri	9.45	1.89	11.75	2.68	72.43	1.80	2.1	13.0	3.0	79.9	2.0	do	2185
2186	Silver Chaff, raised in Missouri	10.99	2.22	11.19	2.29	70.89	2.42	2.5	12.6	2.6	79.6	2.7	do	2186
2187	Ooterey, raised in Missouri	11.48	1.90	11.43	1.88	70.95	2.36	2.2	12.9	2.1	80.1	2.7	do	2187
2188	Rice, raised in Missouri	9.36	1.88	14.00	1.77	70.62	2.37	2.1	15.5	1.9	77.9	2.6	do	2188
2189	Tennessee Amber, raised in Missouri	9.41	1.88	10.50	1.85	74.01	2.35	2.1	12.7	2.0	81.6	2.6	do	2189
	Varieties raised in Missouri. Maximum	13.52	2.22	14.00	2.72	75.17	2.42	2.5	15.5	3.0	81.6	2.7		
	Varieties raised in Missouri. Minimum	7.69	1.55	10.50	1.53	69.95	1.47	1.8	11.7	1.7	77.0	1.7		
	Varieties raised in Missouri. Average	9.80	1.92	11.57	2.17	72.36	2.18	2.1	12.8	2.3	80.4	2.4		
2190	Raised in New Jersey on limestone land.	13.30	2.09	11.39	1.90	69.62	1.70	2.4	13.1	2.2	80.3	2.0	U. S. Census, 1880. vol. III, p. 415	2190
2191	Raised in New Jersey on gray rock gravel soil.	13.67	1.82	12.50	1.93	68.34	1.74	2.1	14.5	2.2	79.2	2.0	do	2191
	Raised in New Jersey, fertilizer, per acre—													
2192	None *b*	13.64	2.03	11.00	1.64	70.07	1.62	2.3	12.7	1.9	81.2	1.9	N. J. Ex. Sta. Rep., 1882, p. 59	2192
2193	22 pounds nitrogen *b*	13.31	2.10	9.19	1.65	72.17	1.58	2.4	10.7	2.0	83.1	1.8	do	2193
2194	52½ pounds phosphoric acid *b*	13.66	2.15	10.38	1.60	70.68	1.53	2.5	12.0	1.8	82.0	1.7	do	2194
2195	75 pounds potash *b*	13.90	2.06	9.50	1.67	71.33	1.54	2.4	11.0	2.0	82.9	1.7	do	2195
2196	22 pounds nitrogen, 52½ pounds phosphoric acid *b*	13.73	2.08	10.75	1.75	70.18	1.51	2.4	12.4	2.1	81.4	1.7	do	2196
2197	None *b*	13.51	2.06	10.38	1.71	70.83	1.51	2.3	12.0	2.0	82.0	1.7	do	2197
2198	22 pounds nitrogen, 75 pounds potash *b*	13.75	2.04	10.06	1.71	71.04	1.40	2.4	11.7	2.1	82.2	1.6	do	2198
2199	52½ pounds phosphoric acid, 75 pounds potash *b*	13.77	2.04	9.75	1.78	71.25	1.41	2.3	11.4	2.1	82.6	1.6	do	2199
2200	52½ pounds phosphoric acid, 75 pounds potash, 22 pounds nitrogen *b*	13.90	2.04	9.19	1.70	71.53	1.64	2.4	10.7	2.0	82.8	2.1	do	2200

2201	400 pounds plaster *b*	13.73	2.02	9.94	1.70	70.99	1.56	2.3	11.6	2.0	82.2	1.9	do	2201
2202	20 two-horse loads of barnyard manure *b*	13.95	2.05	9.19	2.04	71.28	1.49	2.4	10.7	2.4	82.5	2.0	do	2202
	Varieties raised in New Jersey. Maximum	13.95	2.15	12.50	2.04	72.17	1.74	2.5	14.5	2.4	83.1	2.1		
	Minimum	13.30	1.82	9.19	1.64	68.34	1.40	2.1	10.7	1.8	79.2	1.6		
	Average	**13.68**	**2.04**	**10.25**	**1.76**	**70.72**	**1.55**	**2.3**	**11.8**	**2.1**	**82.1**	**1.7**		
2203	White Winter, raised in New York	13.07	1.63	10.63	1.79	71.23	1.65	1.9	12.2	2.1	81.9	1.9	U. S. Census, 1880, vol. III, p. 415	2203
2204	Red Winter, raised in New York	13.30	1.70	13.60	1.73	68.08	1.59	2.0	15.7	2.0	78.5	1.8	do	2204
2205	Landreth, raised in New York	11.43	2.10	10.85	1.75	71.85	2.02	2.4	12.2	2.0	81.1	2.3	U. S. Dept. Agr. Rep., 1883, p. 200	2205
	Average, varieties raised in New York.	**12.60**	**1.81**	**11.69**	**1.70**	**70.88**	**1.76**	**2.1**	**13.3**	**2.1**	**80.4**	**2.1**		
2206	Kivet, raised in North Carolina	11.70	1.56	11.03	2.28	71.22	2.22	1.8	12.5	2.6	80.6	2.5	U. S. Dept. Agr. Rep., 1883, p. 201	2206
2207	Do	11.65	1.80	8.93	1.65	73.86	2.11	2.0	10.1	1.9	83.6	2.4	do	2207
2208	Do	10.15	1.50	12.25	1.43	72.52	2.15	1.7	13.6	1.6	80.7	2.4	do	2208
2209	Do	10.90	1.50	9.98	2.12	73.18	2.32	1.7	11.2	2.4	82.1	2.6	do	2209
2210	Rust-Proof, raised in North Carolina	10.40	1.55	10.33	2.87	72.46	2.39	1.7	11.5	3.2	80.9	2.7	do	2210
2211	Do	10.00	1.45	10.15	2.84	72.63	2.33	1.6	11.4	3.2	81.2	2.6	do	2211
2212	Do	9.30	1.80	9.28	1.95	75.42	2.25	2.0	10.2	2.2	83.1	2.5	do	2212
2213	Baltimore, raised in North Carolina	9.55	1.60	9.98	1.54	75.05	2.28	1.8	11.0	1.7	83.0	2.5	do	2213
2214	Do	9.85	1.45	11.20	1.10	74.08	2.32	1.6	12.4	1.2	82.3	2.5	do	2214
2215	Do	9.65	1.65	9.10	1.00	76.35	2.25	1.8	10.1	1.1	84.5	2.5	do	2215
2216	Do	9.20	1.85	10.15	1.60	75.14	2.06	2.0	11.2	1.8	82.7	2.3	do	2216
2217	Do	9.70	1.65	11.38	1.63	73.48	2.16	1.8	12.6	1.8	81.4	2.4	do	2217
2218	Purple Straw, raised in North Carolina	9.40	1.70	10.15	1.70	74.58	2.47	1.9	11.2	1.9	82.3	2.7	do	2218
2219	Do	10.55	1.35	11.90	1.66	72.12	2.42	1.5	13.3	1.9	80.6	2.7	do	2219
2220	Davis, raised in North Carolina	8.45	1.75	11.73	2.53	73.26	2.28	1.9	12.8	2.8	80.0	2.5	U. S. Dept. Agr. Rep., 1883, p. 202	2220
2221	Do	8.35	1.60	10.68	0.44	76.50	2.43	1.8	11.7	0.5	83.4	2.6	do	2221
2222	Do	11.05	1.55	12.43	1.81	70.85	2.31	1.8	14.0	2.1	79.5	2.6	do	2222
2223	Earnhardt, raised in North Carolina	10.92	1.30	9.98	1.03	74.07	2.10	1.5	11.2	1.8	83.1	2.4	do	2223
2224	Golden Premium, raised in North Carolina	10.06	1.70	9.63	1.54	74.44	2.03	1.9	10.8	1.7	83.3	2.3	do	2224
2225	Winter Green, raised in North Carolina	9.40	1.20	9.45	1.44	76.17	2.34	1.3	10.4	1.6	84.1	2.6	do	2225
2226	Hicke Prolific, raised in North Carolina	8.15	1.85	9.63	1.53	76.64	2.20	2.0	10.5	1.6	83.5	2.4	do	2226
2227	White Australian, raised in North Carolina	11.15	1.70	10.15	2.50	72.48	2.02	1.9	11.4	2.8	81.6	2.3	do	2227
	Varieties raised in North Carolina. Maximum	11.70	1.85	12.43	2.87	76.64	2.47	2.0	14.0	3.2	84.5	2.7		
	Minimum	8.15	1.20	8.93	0.44	70.85	2.02	1.3	10.1	0.5	79.5	2.3		
	Average	**10.03**	**1.60**	**10.43**	**1.76**	**73.93**	**2.25**	**1.8**	**11.5**	**2.0**	**82.1**	**2.6**		
2228	Swamp, raised in Ohio *	7.63	1.84	11.59	1.54	74.99	2.41	2.0	12.6	1.7	81.1	2.6	U. S. Dept. Agr. Rep., 1878, p. 147	2228
2229	Michigan Amber, raised in Ohio	11.30	1.99	11.73	1.78	71.80	1.40	2.2	13.2	2.0	81.0	1.6	U. S. Dept. Agr. Rep., 1883, p. 202	2229

* In *loc. cit.*, sugar, gum, and albuminoids soluble and insoluble in alcohol are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.	%	%	%	%	%	%	%	%	%	%	%		
	Wheat, winter varieties—Continued.													
2230	Clawson, raised in Oregon	12.99	1.77	10.50		74.74		2.0	12.1		85.9		Mich. Bd. Agr. Rep., 1877, p. 350	2230
2231	Sonora Club, raised in Oregon	10.91	1.46	10.63		77.00		1.6	11.9		86.5		Mich. Bd. Agr. Rep., 1877, p. 351	2231
2232	Foizy, raised in Oregon*	8.98	1.57	8.40	1.25	77.52	2.28	1.7	9.2	1.4	85.2	2.5	U. S. Dept. Agr. Rep., 1878, p. 147	2232
2233	Brazilian, raised in Oregon*	9.29	1.77	9.45	1.17	76.33	1.99	2.0	10.4	1.3	84.1	2.2	do	2233
2234	White, raised in Oregon*	9.52	1.57	8.58	1.53	77.11	1.69	1.7	9.5	1.7	85.2	1.9	do	2234
2235	Hudson Bay, raised in Oregon	10.97	1.75	8.58	1.88	74.51	2.31	2.0	9.6	2.1	83.7	2.6	U. S. Dept. Agr. Rep., 1883, p. 207	2235
2236	Velvet Chaff, raised in Oregon	10.92	1.95	8.05	1.68	75.60	1.80	2.2	9.1	1.9	84.8	2.0	do	2236
	Varieties raised in Oregon: Maximum	12.99	1.95	10.63	1.88	77.52	2.31	2.2	12.1	2.1	85.2	2.6		
	Varieties raised in Oregon: Minimum	8.98	1.46	8.05	1.17	74.51	1.69	1.6	9.1	1.3	83.7	1.9		
	Varieties raised in Oregon: Average	**9.93**	**1.72**	**8.61**	**1.50**	**76.22**	**2.02**	**1.9**	**9.5**	**1.7**	**84.7**	**2.2**		
2237	Fertilizer, none; raised in Pennsylvania	13.33	2.04	10.86	2.76	69.02	1.99	2.3	12.5	3.2	79.7	2.3	U. S. Dept. Agr. Rep., 1883, p. 200	2237
2238	Fertilizer, phosphoric acid and potash; raised in Pennsylvania.	13.04	1.99	10.50	2.65	69.85	1.97	2.3	12.0	3.1	80.3	2.3	do	2238
2239	Fertilizer, phosphoric acid, potash, and nitrogen; raised in Pennsylvania.	13.16	2.03	11.16	2.51	69.24	1.90	2.3	12.9	2.9	79.7	2.2	do	2239
2240	Fertilizer, phosphoric acid, potash, and double ration of nitrogen; raised in Pennsylvania.	13.06	2.98	11.69	2.45	67.90	1.90	3.5	13.4	2.9	78.0	2.2	do	2240
2241	Fertilizer, phosphoric acid, potash, and triple ration of nitrogen; raised in Pennsylvania.	12.59	1.83	11.70	2.53	69.53	1.92	2.1	13.3	2.9	79.5	2.2	do	2241
2242	Manured, raised in Pennsylvania	12.41	2.09	11.04	2.37	70.10	1.89	2.4	12.7	2.7	80.0	2.2	do	2242
2243	Champion Amber, raised in Pennsylvania	8.95	1.90	11.03	1.35	74.56	2.21	2.1	12.2	1.5	81.8	2.4	do	2243
2244	Lemon, raised in Pennsylvania	8.35	1.90	15.58	1.53	70.13	2.51	2.1	17.0	1.6	76.6	2.7	do	2244
2245	Gold Medal, raised in Pennsylvania	8.60	1.80	9.80	1.38	76.05	2.37	2.0	10.7	1.5	83.2	2.6	do	2245
2246	German Amber, raised in Pennsylvania	7.60	1.70	11.03	1.05	75.98	2.64	1.8	12.0	1.1	82.2	2.9	do	2246
2247	Washington Glass, raised in Pennsylvania	8.45	2.05	12.08	1.75	73.44	2.23	2.3	13.2	1.9	80.2	2.4	do	2247
2248	Swamp, raised in Pennsylvania	9.95	1.65	12.78	1.55	71.94	2.13	1.8	14.1	1.8	80.0	2.3	do	2248
2249	Heiges Prolific, raised in Pennsylvania	10.00	1.15	10.68	1.33	75.07	1.77	1.2	11.8	1.4	83.6	2.0	do	2249
2250	Glick, raised in Pennsylvania	11.55	1.80	12.25	1.80	70.50	2.10	2.0	13.9	2.0	80.0	2.1	do	2250
2251	Champion Amber, raised in Pennsylvania	9.90	1.85	11.20	1.90	72.74	2.41	2.1	12.4	2.1	80.7	2.7	do	2251
2252	Mediterranean White Chaff, raised in Pennsylvania	10.05	1.70	12.08	1.83	72.04	2.30	1.9	13.4	2.0	80.1	2.6	do	2252

2253	Sandamika, raised in Pennsylvania	11.30	1.30	12.60	1.60	71.05	2.15	1.5	14.1	1.8	80.1	2.5	do	2253
2254	Fultz, raised in Pennsylvania	11.40	0.90	10.50	0.90	74.79	1.51	1.0	11.8	1.0	84.5	1.7	do	2254
2255	Gold Dust, raised in Pennsylvania	11.45	0.80	10.50	1.03	74.61	1.61	0.9	11.8	1.1	84.4	1.8	do	2255
2256	Eureka, raised in Pennsylvania	10.50	1.35	11.55	1.60	72.86	2.14	1.0	12.9	1.8	81.4	2.3	do	2256
2257	Washington Glass, raised in Pennsylvania	10.40	1.05	11.55	1.23	73.87	1.90	1.2	12.9	2.0	81.8	2.1	do	2257
2258	Clawson, raised in Pennsylvania	10.60	1.60	11.38	2.23	72.10	2.09	1.8	12.7	2.5	80.7	2.3	do	2258
2259	Gold Medal, raised in Pennsylvania	11.45	0.90	10.68	0.98	74.60	1.39	1.0	12.0	1.1	84.3	1.8	do	2259
2260	Mountain, raised in Pennsylvania	9.50	1.70	9.98	1.32	75.12	2.38	1.9	11.1	1.4	82.9	2.7	do	2260
2261	Mediterranean, raised in Pennsylvania	8.85	1.65	11.55	1.25	74.45	2.25	1.9	12.7	1.4	81.5	2.5	do	2261
2262	Fultz, raised in Pennsylvania	0.55	1.80	9.45	1.70	75.20	2.30	2.0	10.4	1.9	83.2	2.5	do	2262
2263	Do	11.00	1.40	11.38	1.73	72.38	2.11	1.6	12.8	1.9	81.3	2.4	do	2263
2264	Clawson, raised in Pennsylvania	11.35	1.90	11.20	1.75	71.90	1.90	2.1	12.5	2.0	81.3	2.1	do	2264
2265	Hybrid, raised in Pennsylvania	11.50	1.50	11.20	1.78	71.80	2.22	1.7	12.6	2.0	81.2	2.5	do	2265
2266	Burkholder, raised in Pennsylvania	10.78	1.93	10.15	1.69	73.53	1.92	2.1	11.4	1.9	82.5	2.1	do	2266
2267	Pennsylvania Amber, raised in Pennsylvania.	10.72	1.98	11.38	1.95	72.06	1.91	2.2	12.7	2.2	80.8	2.1	do	2267
2268	Fultz, raised in Pennsylvania	11.45	1.97	13.65	1.86	69.61	1.46	2.3	15.4	2.1	78.5	1.7	do	2268
2269	McGhee White, raised in Pennsylvania, crop of 1886.†	9.65	1.21	13.82	1.18	72.66	1.48	1.3	15.3	1.3	80.5	1.6	Pa. Ex. Sta. Rep., 1887, p. 108	2269
2270	McGhee White, raised in Pennsylvania, crop of 1887.†	11.10	1.40	12.61	1.58	71.58	1.73	1.6	14.2	1.8	80.4	2.0	do	2270
2271	Martin Amber, raised in Pennsylvania, crop of 1886.†	10.10	1.15	13.14	1.13	72.43	2.05	1.3	14.6	1.3	80.5	2.3	do	2271
2272	Extra Early Oakley, raised in Pennsylvania, crop of 1886.†	10.00	1.25	14.78	1.30	70.91	1.76	1.4	16.4	1.4	78.8	2.0	do	2272
2273	Extra Early Oakley, raised in Pennsylvania, crop of 1887.†	11.40	1.20	11.55	1.15	73.10	1.60	1.4	13.0	1.3	82.5	1.8	do	2273
2274	Diehl Mediterranean, raised in Pennsylvania, crop of 1886.†	10.90	1.50	14.00	1.55	70.40	1.65	1.7	15.7	1.7	79.0	1.9	do	2274
2275	Fulcaster, raised in Pennsylvania, crop of 1887.†	10.90	1.35	14.18	1.53	69.44	2.60	1.5	16.0	1.7	77.9	2.9	do	2275
2276	German Emperor, raised in Pennsylvania, crop of 1887.†	10.90	1.70	12.61	1.73	70.82	2.24	1.9	14.2	1.9	79.5	2.5	do	2276
2277	Raub Black Prolific, raised in Pennsylvania, crop of 1887.†	11.00	1.50	14.07	1.66	70.02	1.75	1.7	16.8	1.9	78.7	1.9	do	2277
	Varieties raised in Pennsylvania. Maximum	13.33	2.98	15.58	2.76	76.05	2.64	3.5	17.0	3.2	84.5	2.9		
	Varieties raised in Pennsylvania. Minimum	7.60	0.80	9.45	0.90	67.90	1.39	0.9	10.4	1.0	76.6	1.6		
	Varieties raised in Pennsylvania. Average	**10.70**	**1.62**	**11.83**	**1.66**	**72.18**	**2.01**	**1.8**	**13.2**	**1.9**	**80.9**	**2.2**		
2278	Swamp, raised in Tennessee	7.10	2.10	16.63	1.85	70.24	2.08	2.3	17.9	2.0	75.6	2.2	U. S. Dept. Agr. Rep., 1883, p. 204	2278
2279	Tennessee Amber, raised in Tennessee	9.90	1.85	11.90	1.48	72.78	2.09	2.1	13.2	1.6	80.8	2.3	do	2279
2280	Spark Swamp, raised in Tennessee	10.24	1.80	11.55	1.73	72.37	2.31	2.0	12.9	1.9	80.6	2.6	do	2280
2281	Rice, raised in Tennessee	9.19	2.04	9.98	2.24	74.40	2.15	2.2	11.0	2.5	81.9	2.4	do	2281
2282	White Mediterranean, raised in Tennessee	10.92	2.37	15.23	2.86	66.71	1.90	2.7	17.1	3.2	74.9	2.1	do	2282
2283	Do	10.64	2.10	10.15	2.20	72.87	2.04	2.3	11.4	2.5	81.5	2.3	do	2283
2284	Red, raised in Tennessee	11.85	1.90	10.85	1.83	71.77	2.00	2.2	12.3	2.1	81.1	2.3	do	2284
2285	Tennessee Amber, raised in Tennessee	9.90	1.85	11.90	1.48	72.78	2.09	2.1	13.2	1.6	80.8	2.3	do	2285
2286	Do	11.10	1.62	12.60	1.67	70.95	2.06	1.8	14.2	1.9	79.8	2.3	do	2286

* In *loc. cit.*, sugar, gum, and albuminoids, soluble and insoluble in alcohol are given.

† In *loc. cit.*, moist and dry crude gluten are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Wheat, winter varieties—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2287	Bearded, raised in Tennessee	11.30	1.90	12.43	2.54	69.71	2.12	2.1	14.1	2.9	78.5	2.4	U. S. Dept. Agr. Rep., 1883, p. 204	2287
2288	Fultz, raised in Tennessee	10.64	1.60	12.60	2.13	70.87	2.16	1.8	14.1	2.4	79.3	2.4	do	2288
2289	Do	10.66	1.92	12.08	2.36	71.11	1.87	2.1	13.5	2.6	79.7	2.1	do	2289
2290	California Gold Chaff, raised in Tennessee	10.26	1.72	15.40	2.21	68.72	1.69	1.9	17.2	2.5	76.5	1.9	do	2290
2291	Swamp, raised in Tennessee	8.95	1.65	11.90	1.70	73.60	2.20	1.8	13.1	1.9	80.8	2.4	do	2291
	Varieties raised in Tennessee. Maximum	11.85	2.37	16.03	2.86	74.40	2.31	2.7	17.9	3.2	81.9	2.6		
	Varieties raised in Tennessee. Minimum	7.10	1.60	9.98	1.48	66.71	1.69	1.8	11.0	1.6	74.9	1.9		
	Varieties raised in Tennessee. Average	**10.19**	**1.89**	**12.51**	**2.02**	**71.33**	**2.06**	**2.1**	**13.9**	**2.2**	**79.5**	**2.3**		
2292	Red Mediterranean, raised in Texas	8.88	2.02	15.23	2.09	69.44	2.34	2.2	16.7	2.3	76.2	2.6	U. S. Dept. Agr. Rep., 1883, p. 205	2292
2293	Do	11.61	1.69	12.08	1.92	70.62	2.08	1.9	13.7	2.2	79.8	2.4	do	2293
2294	White Mediterranean, raised in Texas	12.05	2.02	13.48	1.91	68.95	1.59	2.3	15.3	2.2	78.4	1.8	do	2294
2295	Nicaraguan, raised in Texas	9.94	1.58	11.73	1.71	72.75	2.29	1.8	13.0	1.9	80.7	2.6	do	2295
	Average, varieties raised in Texas	**10.62**	**1.83**	**13.13**	**1.91**	**70.44**	**2.07**	**2.0**	**14.7**	**2.1**	**78.9**	**2.3**		
2296	Cross, raised in Vermont	10.87	1.75	10.09	2.52	72.13	2.04	2.0	12.0	2.8	80.9	2.3	U. S. Dept. Agr. Rep., 1883, p. 200	2296
2297	McGhee Red, raised in Virginia	8.80	1.05	13.65	1.48	72.53	2.49	1.2	15.0	1.6	79.5	2.7	U. S. Dept. Agr. Rep., 1883, p. 201	2297
2298	Finlay, raised in Virginia	9.45	1.60	11.72	1.18	73.65	2.38	1.8	12.9	1.3	81.4	2.6	do	2298
2299	Hybrid, raised in Virginia	11.54	1.65	12.78	1.73	70.30	2.00	1.9	14.5	1.9	79.4	2.3	do	2299
2300	Shenandoah 1, raised in Virginia	9.45	2.45	14.00	1.90	70.02	2.18	2.7	15.5	2.1	77.3	2.4	do	2300
2301	Shenandoah 2, raised in Virginia	11.15	1.60	10.15	1.78	72.76	2.56	1.8	11.4	2.0	81.9	2.9	do	2301
2302	Shenandoah 3, raised in Virginia	9.28	2.00	11.55	1.65	73.16	2.38	2.2	12.7	1.8	80.7	2.6	do	2302
2303	Harrisen, raised in Virginia	11.14	1.86	11.73	1.70	71.11	2.46	2.1	13.2	1.9	80.0	2.8	do	2303
2304	McGhee White, raised in Virginia	9.35	1.60	12.43	1.96	72.81	1.85	1.8	13.7	2.2	80.3	2.0	do	2304
2305	Dallas, raised in Virginia	12.26	1.58	12.78	1.96	69.59	1.83	1.8	14.6	2.2	79.3	2.1	do	2305
2306	Fultz-Clawson, raised in Virginia	12.10	1.80	10.50	1.75	71.84	2.01	2.1	11.9	2.0	81.7	2.3	do	2306
2307	Wyeor, raised in Virginia	9.25	1.55	12.60	1.73	72.71	2.16	1.7	13.9	1.9	80.1	2.4	do	2307
	Varieties raised in Virginia. Maximum	12.26	2.45	14.00	1.96	73.65	2.56	2.7	15.5	2.2	81.9	2.9		
	Varieties raised in Virginia. Minimum	8.80	1.05	10.15	1.18	69.59	1.83	1.2	11.4	1.3	77.3	2.0		
	Varieties raised in Virginia. Average	**10.34**	**1.69**	**12.17**	**1.71**	**71.87**	**2.22**	**1.9**	**13.6**	**1.9**	**80.1**	**2.5**		

2308	Fultz, raised in Wisconsin	12.34	1.89	11.09	1.76	71.30	1.62	2.2	12.7	2.0	81.2	1.9	U. S. Census, 1880, vol. III, p. 414	2308
2309	Buckeye or White Wabash, locality not given	12.73	1.38	10.97		74.92		1.6	12.7		85.7		Mich. Bd. Agr. Rep., 1877, p. 350	2309
2310	Fultz, locality not given	10.40	1.15	11.90	1.71	72.39	2.45	1.3	13.3	1.9	80.8	2.7	U. S. Dept. Agr. Rep., 1879, p. 100	2310
2311	Red, locality not given	10.19	1.84	9.94	1.84	74.17	2.02	2.0	11.1	2.0	82.6	2.3	N. J. Ex. Sta. Rep., 1881, p. 52	2311
2312	White, locality not given	11.15	1.72	10.10	1.21	73.85	1.97	1.9	11.4	1.4	83.1	2.2	do	2312
2313	Fultz, locality not given	9.93	1.82	9.81	1.89	74.65	1.90	2.0	10.9	2.1	82.9	2.1	do	2313
2314	No. 2 Red Winter, locality not given	12.84	1.86	10.94	1.79	71.04	1.53	2.1	12.6	2.0	81.5	1.8	U. S. Census, 1880, vol. III, p. 414	2314
2315	McGhee White, locality not given *	8.82	1.37	11.47	1.16	75.37	1.81	1.5	12.0	1.3	82.6	2.0	Penn. Ex. Sta. Rep., 1887, p. 108	2315
2316	Martin Amber locality not given *	8.72	1.55	10.70	1.48	75.39	2.16	1.7	11.7	1.6	82.6	2.4	do	2316
2317	Extra Early Oakley, locality not given *	10.83	1.40	2.18	1.38	72.65	1.56	1.5	13.7	1.5	81.5	1.8	do	2317
2318	Diehl Mediterranean, locality not given *	9.35	1.21	8.75	1.18	77.74	1.77	1.3	9.7	1.3	85.7	2.0	do	2318
2319	Fulcaster, locality not given *	10.60	1.30	13.03	1.53	71.69	1.85	1.5	14.6	1.7	80.2	2.0	do	2319
2320	German Emperor, locality not given *	10.49	1.05	10.86	1.93	73.91	1.85	1.2	12.1	2.2	82.4	2.1	do	2320
2321	Raub Black Prolific, locality not given *	10.20	1.35	10.77	2.70	73.38	1.60	1.5	12.0	3.0	81.7	1.8	do	2321
	All complete analyses of winter wheat. Maximum	13.95	3.57	16.63	2.87	77.74	3.93	3.5	17.9	3.2	85.7	4.3		
	Minimum	7.10	0.80	8.05	0.44	66.71	1.26	0.9	9.1	0.5	74.9	1.6		
	Average	**10.52**	**1.83**	**11.77**	**1.75**	**72.04**	**2.09**	**2.0**	**13.1**	**2.0**	**80.6**	**2.3**		
	Wheat, unclassified:													
2322	Variety unknown, raised in Kansas	11.58	1.72	10.85	2.01	71.86	1.98	1.9	12.1	2.2	81.6	2.2	U. S. Dept. Agr. Rep., 1883, p. 205	2322
2323	Do	11.77	1.84	11.20	1.97	71.15	2.07	2.0	12.7	2.3	80.7	2.3	do	2323
2324	Do	11.60	1.78	10.50	1.89	72.19	2.04	2.0	11.8	2.2	81.7	2.3	do	2324
2325	Do	11.36	1.54	12.25	2.76	70.18	1.91	1.7	13.8	3.2	79.2	2.1	do	2325
2326	Do	11.57	1.47	11.03	1.62	72.29	2.02	1.7	12.3	1.9	81.8	2.3	do	2326
2327	Do	12.38	1.58	10.50	1.75	71.96	1.83	1.8	11.9	2.0	82.3	2.0	do	2327
2328	Do	12.27	1.61	11.90	2.09	70.12	2.01	1.8	13.6	2.4	79.9	2.3	do	2328
2329	Do	12.10	1.70	10.85	1.66	71.73	1.96	1.9	12.4	1.9	81.5	2.3	do	2329
2330	Do	11.62	1.66	10.68	3.05	70.87	2.12	1.8	12.0	3.4	80.4	2.4	do	2330
2331	Do	11.76	1.50	11.73	2.03	71.15	1.83	1.7	13.2	2.3	80.8	2.0	do	2331
2332	Fife No. 1, raised in Minnesota	12.34	1.59	13.06	2.03	.....	.....	1.8	14.9	2.4	.....	.....	U. S. Dept. Agr. Rep., 1883, p. 204	2332
2333	Fife No. 2, raised in Minnesota	11.31	1.92	13.00	2.37	.....	.....	2.1	14.7	2.7	.....	.....	do	2333
2334	Fife No. 3, raised in Minnesota	11.85	1.97	13.56	2.50	.....	.....	2.2	15.3	2.8	.....	.....	do	2334
2335	Egyptian, raised in Minnesota	10.44	1.95	13.30	1.55	70.99	1.77	2.2	14.8	1.8	79.2	2.0	do	2335
2336	Scotch Fife, raised in Minnesota	10.62	1.90	10.85	2.31	72.24	2.08	2.1	12.2	2.6	80.8	2.3	do	2336
2337	Red Fern, raised in Minnesota	11.74	1.91	17.15	2.20	64.84	2.16	2.2	19.4	2.5	73.4	2.5	do	2337
2338	Fife, raised in Minnesota	10.31	1.79	13.48	2.89	69.37	2.16	2.0	15.0	3.2	77.4	2.4	do	2338
2339	Old Settlers, raised in Minnesota	10.10	1.57	12.43	1.81	72.26	1.83	1.8	13.8	2.0	80.4	2.9	do	2339
2340	Red Fern, raised in Minnesota	10.08	1.43	12.25	1.96	72.09	2.19	1.6	13.6	2.2	80.4	2.2	do	2340
2341	Fife, raised in Minnesota	11.34	1.50	11.55	1.82	71.77	2.02	1.7	13.0	2.0	80.9	2.4	do	2341
2342	Golden Drop, raised in Minnesota	11.10	1.53	11.55	1.96	71.97	1.89	1.7	13.1	2.3	80.7	2.2	U. S. Dept. Agr. Rep., 1883, p. 205	2342
2343	White Fife, raised in Minnesota	9.70	1.80	11.38	1.88	73.05	2.19	2.0	12.6	2.1	80.9	2.4	do	2343
2344	Variety unknown, raised in Texas	10.64	1.92	12.43	2.39	70.23	2.39	2.1	13.8	2.7	78.7	2.7	do	2344
2345	Do	9.70	1.66	12.95	1.99	71.14	2.56	1.9	14.4	2.2	78.6	2.9	do	2345
2346	Do	9.26	2.18	14.35	2.08	70.19	1.94	2.4	15.8	2.4	77.2	2.2	do	2346
2347	Do	9.36	1.64	13.65	2.25	70.95	2.15	1.8	15.1	2.5	78.2	2.4	do	2347
2348	Do	9.50	1.60	11.03	2.01	73.86	2.90	1.8	12.2	2.2	81.6	2.2	do	2348
2349	Do	9.50	1.94	13.65	1.89	71.13	1.89	2.2	15.0	2.1	78.6	2.1	do	2349
2350	Do	9.66	2.43	14.18	2.10	69.68	1.86	2.7	15.7	2.4	77.1	2.1	do	2350
2351	Do	10.26	1.86	13.65	1.90	70.37	1.96	2.1	15.1	2.1	78.5	2.2	do	2351

* In *loc. cit.*, moist and dry crude gluten are given.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Wheat, unclassified—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2352	Variety unknown, raised in Texas	10.24	1.72	12.60	2.22	71.46	1.76	2.0	14.2	2.5	79.3	2.0	U. S. Dept. Agr. Rep., 1883, p. 205	2352
2353	Do	10.00	1.52	14.00	2.01	70.55	1.92	1.7	15.6	2.2	78.4	2.1	do	2353
2354	Do	9.62	1.68	14.00	2.19	70.79	1.72	1.9	15.5	2.4	78.3	1.9	do	2354
2355	Nicaraguan, raised in Texas	10.00	1.72	14.70	2.20	69.55	1.83	1.9	16.3	2.4	77.4	2.0	do	2355
2356	Variety unknown, raised in Texas	10.28	1.89	10.68	2.05	72.73	2.46	2.0	11.9	2.3	81.1	2.7	do	2356
2357	Do	10.04	1.76	12.60	2.19	70.95	2.46	2.0	13.9	2.3	79.0	2.8	do	2357
2358	Do	10.00	1.76	12.60	2.03	70.78	2.83	2.0	13.9	2.1	78.9	3.1	do	2358
2359	Do	9.05	2.06	12.43	2.33	71.67	2.46	2.2	13.6	2.5	79.0	2.7	U. S. Dept. Agr. Bul. 4, p. 40	2359
	Wheat, all complete analyses of all varieties. Maximum	13.95	3.57	17.15	3.05	78.66	3.93	3.5	17.9	3.4	85.7	4.3		
	Wheat, all complete analyses of all varieties. Minimum	7.10	0.86	8.05	0.44	64.84	1.26	0.9	8.8	0.5	73.4	1.6		
	Wheat, all complete analyses of all varieties. Average	**10.52**	**1.83**	**11.87**	**1.79**	**71.90**	**2.09**	**2.0**	**13.3**	**2.0**	**80.4**	**2.3**		
	Wheat, inferior, rusted and frosted, raised in Minnesota:													
2360	Grade No. 2, Northern, 2 pounds off *a**	9.52	1.06	14.56	2.90	69.80	2.16	1.2	16.1	3.2	77.2	2.3	Minn. Ex. Sta. Bul. 7, 1889	2360
2361	Grade No. 1, Northern, 2½ pounds off *a**	9.71	1.50	13.38	2.02	71.26	2.13	1.7	14.8	2.2	79.0	2.3	do	2361
2362	No grade *a**	8.82	1.75	13.75	1.86	71.46	2.36	2.0	15.0	2.0	78.4	2.6	do	2362
2363	No. 3, 1 pound off *	9.76	1.75	14.88	1.91	69.45	2.25	2.0	16.5	2.1	76.8	2.6	do	2363
2364	No. 1, hard, 2 pounds off *a**	10.30	2.14	14.88	3.20	67.40	2.08	2.3	16.6	3.5	75.3	2.3	do	2364
2365	No grade, 2 pounds off *a**	10.05	1.63	14.25	1.10	70.79	2.18	1.8	15.8	1.2	78.8	2.4	do	2365
2366	No. 3, 2 pounds off *	11.57	1.62	13.13	1.08	69.85	2.75	1.8	14.8	1.2	79.1	3.1	do	2366
2367	Do *a**	9.11	1.71	14.63	1.67	70.01	2.87	1.9	16.0	1.8	77.1	3.2	do	2367
2368	No. 1, Northern, 2 pounds off *a**	11.16	1.72	13.56	1.49	70.08	1.99	1.9	15.2	1.7	78.9	2.3	do	2368
2369	No. 3, 1½ pounds off *a**	11.78	1.33	13.69	2.23	68.72	2.25	1.5	15.5	2.5	78.0	2.5	do	2369
2370	Saskatchewan Fife *a* †	9.89	2.80	17.94	3.36	62.08	3.93	3.1	19.8	3.8	69.0	4.3	do	2370
2371	Do *a* †	8.53	2.00	18.56	3.85	63.33	3.73	2.2	20.3	4.2	69.2	4.1	do	2371
2372	Variety unknown *a* †	8.42	2.13	17.63	5.08	61.46	5.28	2.3	19.2	5.5	67.2	5.8	do	2372
2373	Do *a* †	10.29	1.54	17.63	3.20	63.85	3.49	1.7	19.6	3.5	71.3	3.9	do	2373
2374	Scotch Fife †	9.92	1.72	16.56	3.09	64.97	3.74	1.9	18.4	3.4	72.2	4.1	do	2374
2375	Do *a* †	8.91	1.80	17.38	3.98	64.32	3.81	2.0	19.0	4.3	70.6	4.1	do	2375
2376	Do *a* †	8.94	1.64	16.81	2.61	68.85	3.15	1.8	18.5	2.8	73.3	3.6	do	2376
2377	Mammoth Spring *a* †	11.22	1.82	14.25	2.05	65.63	3.03	2.0	16.1	2.3	76.2	3.4	do	2377
2378	Blue Stem †	8.79	1.62	14.75	4.67	67.35	2.82	1.8	16.1	5.2	73.8	3.1	do	2378
2379	Saskatchewan Fife †	9.00	1.89	14.56	2.16	69.46	2.93	2.1	16.0	2.3	76.4	3.2	do	2379

	Rice:													
2380	Carolina Golden Seed	12.93	0.38	8.55	0.17	77.70	0.27	0.4	9.8	0.2	89.3	0.3	U. S. Dept. Agr. Rep., 1879, p. 102	2380
2381	Carolina White Seed	13.31	0.34	8.31	0.13	77.61	0.30	0.4	9.6	0.2	89.4	0.4	do	2381
2382	Japan, fully cleaned	13.09	0.43	5.86	0.11	80.23	0.28	0.5	6.8	0.1	92.3	0.3	do	2382
2383	Japan	14.02	0.42	7.44	0.17	77.53	0.42	0.5	8.7	0.2	90.1	0.5	do	2383
2384	Paina, Bengal	12.85	0.35	7.70	0.14	78.64	0.32	0.4	8.8	0.2	90.2	0.4	do	2384
2385	Rangoon	11.45	0.34	7.35	0.19	80.28	0.39	0.4	8.3	0.2	90.7	0.4	do	2385
2386	Bassein, F. India	11.38	0.48	8.40	0.19	78.93	0.62	0.5	9.6	0.2	89.1	0.7	do	2386
2387	White seed, grown in Louisiana	12.16	0.33	6.65	0.19	80.40	0.27	0.4	7.6	0.2	91.5	0.3	do	2387
2388	Honduras, grown in Louisiana	11.80	0.34	7.26	0.19	80.11	0.30	0.4	8.2	0.2	90.9	0.3	do	2388
2389	Volunteer, grown in Louisiana	11.45	0.40	6.83	0.40	80.55	0.37	0.5	7.7	0.5	90.9	0.4	do	2389
	Maximum	14.02	0.48	8.55	0.40	80.55	0.62	0.5	9.8	0.5	91.5	0.7		
	Minimum	11.38	0.33	5.86	0.11	77.53	0.27	0.4	6.8	0.1	89.1	0.3		
	Average	**12.44**	**0.38**	**7.44**	**0.19**	**79.20**	**0.35**	**0.4**	**8.5**	**0.2**	**90.5**	**0.4**		
2390	Rough *a*	10.95	5.45	7.44	0.28	64.30	2.58	6.1	8.2	10.4	72.4	2.9	La. Ex. Sta. Bul. 24, 1888, p. 389	2390
2391	From the storee *a*	12.12	2.55	8.09	3.03	72.11	2.10	2.9	9.2	3.5	82.0	2.4	do	2391
2392	From the cooling floor *a*	12.75	0.82	7.74	0.72	76.92	1.05	0.9	8.9	0.8	88.2	1.2	do	2392
2393	Clean *a*	12.85	0.73	7.53	0.47	78.05	0.38	0.8	8.6	0.5	89.7	0.4	do	2393
2394	Pounded *a*	12.42	2.38	8.14	2.55	72.01	2.50	2.7	9.3	2.9	82.2	2.9	do	2394
2395	Hungarian grass seed *b*	9.51	4.96	9.94	7.65	63.22	4.72	5.5	11.0	8.4	69.9	5.2	N. J. Ex. Sta. Rep., 1886, p. 164	2395
	Buckwheat:													
2396	Silver Hull, crop of 1879, grown in Connecticut.	14.82	2.10	8.58	7.77	64.50	2.23	2.5	10.1	9.1	75.7	2.6	U. S. Census, 1880, vol. III, p. 423	2396
2397	Common Gray, crop of 1879, grown in Connecticut.	13.63	2.34	8.75	8.39	64.70	2.19	2.7	10.1	9.7	75.0	2.5	do	2397
2398	Silver Hull, crop of 1879, grown in Massachusetts.	12.78	1.57	10.06	8.80	64.58	2.21	1.8	11.5	10.1	74.0	2.6	do	2398
2399	Silver Hull, crop of 1879, grown in Minnesota.	11.47	1.83	11.00	8.02	65.37	2.31	2.1	12.4	9.1	73.8	2.6	do	2399
2400	Common Gray, crop of 1879, grown in New Hampshire.	11.38	2.04	10.18	9.37	64.88	2.15	2.3	11.5	10.6	73.2	2.4	do	2400
2401	Common, crop of 1879, grown in New Jersey	12.50	2.25	10.41	9.00	63.63	2.21	2.6	11.9	10.3	72.7	2.5	do	2401
2402	Do	13.50	2.07	10.71	8.88	62.63	2.21	2.4	12.4	10.3	72.3	2.6	do	2402
2403	Silver Gray, crop of 1879, grown in New York	10.89	1.99	10.50	9.11	65.12	2.39	2.2	11.8	10.2	73.1	2.7	do	2403
2404	Variety unknown *b*	10.77	2.28	10.13		74.37	2.45	2.6	11.5		83.1	2.8	N. J. Ex. Sta. Rep., 1885, p. 168	2404
	All complete analyses: Maximum	14.82	2.34	11.00	9.37	65.37	2.39	2.7	12.4	10.6	75.7	2.7		
	All complete analyses: Minimum	10.89	1.57	8.58	7.77	62.63	2.15	1.8	10.1	9.1	72.3	2.4		
	All complete analyses: Average	**12.62**	**2.02**	**10.02**	**8.67**	**64.43**	**2.24**	**2.3**	**11.5**	**9.9**	**73.7**	**2.6**		
	Soja bean (*Soja hispida*):													
2405	Variety unknown	9.64	4.83	35.39	4.96	26.17	19.01	5.3	39.1	5.5	49.1	21.0	N. J. Ex. Sta. Rep., 1881, p. 53	2405
2406	Yellow	10.13	3.07	34.63	3.69	30.50	17.98	3.4	38.5	4.1	34.0	20.0	N. C. Ex. Sta. Rep., 1882, p. 120	2406
2407	Variety unknown	6.05	5.25	38.62	4.03	29.24	16.80	5.5	41.0	4.3	31.3	17.9	Cornell Univ. Ex. Sta. Rep., 1883, p. 22	2407
2408	Do	8.06	4.70	40.22	7.81	26.94	12.27	5.1	43.8	8.5	29.2	13.4	N. Y. State Ex. Sta. Rep., 1886, p. 365	2408

* Graded, gluten determinations in *loc. cit.*

† Ungraded, gluten determinations in *loc. cit.*

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	GRAIN AND OTHER SEEDS—Continued.													
	Soja bean (*Soja hispida*)—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2409	Variety unknown *a*	10.00	4.72	35.25	2.45	30.69	16.89	5.2	39.1	2.7	34.2	18.8	S. C. Ex. Sta. Rep., 1888, p. 135	2409
2410	White *c*	17.38	4.31	27.56	4.42	28.24	18.09	5.2	33.4	5.3	34.2	21.9	Mass. State Ex. Sta. Rep., 1889, p. 140	2410
2411	Do	5.85	5.24	33.88	4.85	32.84	17.34	5.6	36.0	5.2	34.8	18.4	do	2411
2412	Black *c*	19.27	5.40	26.25	6.13	26.57	16.38	6.7	32.5	7.6	32.9	20.3	Mass. State Ex. Sta. Rep., 1889, p. 141	2412
	Maximum	19.27	5.40	40.22	6.13	32.84	19.01	6.7	43.8	8.5	49.1	21.9		
	Minimum	5.85	3.07	26.25	2.45	26.17	12.27	3.4	32.5	2.7	29.2	13.4		
	Average	**10.80**	**4.69**	**33.98**	**4.79**	**28.89**	**16.85**	**5.3**	**38.1**	**5.4**	**32.2**	**19.0**		
	Cowpea:													
2413	Black	20.85	2.94	20.08	4.34	50.51	1.28	3.7	25.4	5.5	63.8	1.6	N. C. Ex. Sta. Rep., 1879, p. 112	2413
2414	Yellow	19.20	3.31	23.02	5.03	48.07	1.37	4.1	28.5	6.2	59.5	1.7	do	2414
2415	Variety unknown	11.76	3.16	19.31	3.49	60.81	1.47	3.5	21.8	4.0	69.0	1.7	N. J. Ex. Sta. Rep., 1881, p. 53	2415
2416	Black-eyed	12.22	3.32	21.59	4.07	57.25	1.55	3.6	24.5	4.7	65.4	1.8	do	2416
2417	Variety unknown *b*	10.01	3.35	19.75	3.37	61.99	1.53	3.8	21.0	3.8	68.8	1.7	N. J. Ex. Sta. Rep., 1882, p. 71	2417
	Maximum	20.85	3.35	23.02	5.03	61.99	1.55	4.1	28.5	6.2	69.0	1.8		
	Minimum	10.01	2.94	19.31	3.37	50.51	1.28	3.6	21.8	3.8	59.5	1.6		
	Average	**14.81**	**3.22**	**20.75**	**4.06**	**55.72**	**1.44**	**3.8**	**24.3**	**4.7**	**65.5**	**1.7**		
2418	Beans, white field beans	15.00	3.10	20.37	3.20	56.71	1.62	3.6	23.9	3.8	66.8	1.9	Conn. State Ex. Sta. Rep., 1887, p. 105	2418
2419	Sword bean	10.37	2.68	26.60	4.13	53.10	3.12	3.0	29.6	4.6	59.3	3.5	U. S. Dept. Agr. Rep., 1879, p. 10	2419
2420	Navy or pea bean	12.39	3.71	22.17	7.21	53.14	1.38	4.2	25.3	8.2	66.7	1.6	N. Y. State Ex. Sta. Rep., 1885, p. 304	2420
2421	Linseed	6.25	4.03	25.50	10.34	15.37	37.92	4.9	27.3	11.0	16.4	40.4	Mo. Agr. Col. Farm Bul. 27, 1887, p. 6	2421
2422	Linseed, grown in Canada	8.30	3.46	20.47	4.87	30.80	32.10	3.8	22.3	5.3	33.7	34.9	Ontario Agr. Col. Bul. 34, 1888	2422
2423	Peanuts, hulls removed*	10.88	3.80	31.52	3.13	12.22	3.80	.....	.....	.....	.....	.....	Ala. Farm Jour., 1880, p. 333	2423
	MILL PRODUCTS.													
	MILL PRODUCTS FROM CORN (MAIZE).													
	Corn (maize) meal:													
2424	Not described	12.91	1.17	8.69	1.79	71.93	3.51	1.3	10.0	2.1	82.6	4.0	Conn. State Ex. Sta. Rep., 1877, p. 56	2424
2425	From home-ground yellow flint	20.67	1.17	7.81	0.93	66.35	3.97	1.5	9.8	1.2	83.6	3.9	do	2425

2426	From Western corn	21.67	1.16	7.38	1.41	65.88	2.50	1.5	9.4	1.8	84.1	3.2	do		2426
2427	From old Western corn	14.56	1.22	9.12	2.16	68.89	4.05	1.4	10.7	2.5	80.7	4.7	Conn. State Ex. Sta. Rep., 1880, p. 81		2427
2428	From New York corn	15.32	1.47	8.63	1.83	68.77	3.98	1.7	10.2	2.2	81.2	4.7	do		2428
2429	Not described	13.87	1.33	7.88	1.60	71.92	3.40	1.5	9.2	1.9	83.4	4.0	N. J. Ex. Sta. Rep., 1880, p. 46		2429
2430	Do	12.79	1.40	7.81	1.57	72.70	3.73	1.6	9.0	1.8	83.3	4.3	N. J. Ex. Sta. Rep., 1880, p. 47		2430
2431	Do	11.99	1.93	8.50	2.38	71.13	4.07	2.1	9.8	2.7	80.8	4.6	N. J. Ex. Sta. Rep., 1881, p. 53		2431
2432	Do	9.86	1.92	10.85	2.38	70.36	4.63	2.1	12.1	2.6	78.1	5.1	U. S. Dept. Agr. Rep., 1881-'82, p. 553		2432
2433	Do	12.75	1.48	8.35	1.60	71.76	4.06	1.7	9.4	1.8	82.5	4.6	N. J. Ex. Sta. Rep., 1882, p. 71		2433
2434	Do. *b*	11.99	3.46	8.59	2.03	69.82	4.11	4.6	9.8	2.3	79.2	4.7	do		2434
2435	Do	14.60	1.60	9.20	1.90	69.10	3.60	1.9	10.8	2.2	80.9	4.2	Maine Agr., 1882, p. 302		2435
2436	Do	13.24	1.40	10.09	1.71	69.05	4.51	1.6	11.6	2.0	79.6	5.2	Cornell Univ. Ex. Sta. Rep., 1883, p. 41		2436
2437	Do	18.81	1.30	8.81	1.35	67.37	2.36	1.6	10.9	1.6	83.0	2.9	Conn. State Ex. Sta. Rep., 1883, p. 84		2437
2438	Do	17.04	1.31	13.94	2.98	60.73	4.00	1.6	16.8	3.6	73.2	4.8	Mass. State Ex. Sta. Rep., 1883, p. 65		2438
2439	Do	13.55	1.23	9.00	2.28	70.27	3.67	1.4	10.4	2.6	81.4	4.2	Mass. State Ex. Sta. Rep., 1883, p. 66		2439
2440	Do	19.98	1.18	8.65	0.50	65.35	4.34	1.5	10.8	0.6	81.7	5.4	N. Y. Ex. Sta. Rep., 1883, p. 151		2440
2441	From whole kernels	12.84	1.15	7.52	0.98	73.88	3.63	1.3	8.6	1.1	84.8	4.2	do		2441
2442	From flinty portion of kernel, same corn as the preceding.	13.05	1.09	7.66	0.96	73.43	3.81	1.2	8.8	1.1	84.5	4.4	do		2442
2443	From that portion of the kernel containing and surrounding the germ, same corn as the two preceding.	12.53	1.26	7.11	1.68	73.96	3.46	1.4	8.1	1.9	84.6	4.0	do		2443
2444	Not described	11.95	1.40	11.56	2.28	68.91	3.90	1.6	13.1	2.6	78.3	4.4	Mass. State Ex. Sta. Rep., 1884, p. 111		2444
2445	Do	12.40	1.45	9.44	2.37	70.71	3.63	1.7	10.8	2.7	80.7	4.1	do		2445
2446	Do	13.85	1.23	8.95	2.28	70.03	3.66	1.4	10.4	2.6	81.4	4.2	Mass. State Ex. Sta. Rep., 1884, p. 41		2446
2447	Do. *b*	15.75	1.35	8.76	1.70	68.54	3.90	1.7	10.4	2.6	81.3	4.6	N. J. Ex. Sta. Rep., 1884, p. 107		2447
2448	Do. *b*	16.60	1.55	8.44	1.91	67.58	3.92	1.9	10.1	2.3	81.0	4.7	do		2448
2449	Do	16.17	1.45	8.60	1.81	68.06	3.91	1.7	10.2	2.1	81.3	4.7	N. J. Ex. Sta. Rep., 1884, p. 116		2449
2450	Do	20.30	1.17	9.06	1.41	65.83	2.23	1.5	11.4	1.8	82.5	2.8	N. Y. Ex. Sta. Rep., 1884, p. 332		2450
2451	Do	24.54	1.18	8.20	1.52	66.60	3.96	1.5	10.9	2.0	80.4	5.2	do		2451
2452	Do	21.00	1.29	9.02	1.74	64.62	2.33	1.6	11.4	2.2	81.8	3.0	do		2452
2453	Pure corn meal *b*	11.75	1.40	9.00	73.32		4.53	1.6	10.2	83.1		5.1	N. J. Ex. Sta. Rep., 1885, p. 164		2453
2454	Not described	13.51	1.40	9.06	72.41		3.62	1.6	10.5	83.7		4.2	do		2454
2455	Do. *b*	13.61	1.42	8.75	72.93		3.89	1.6	10.1	83.8		4.5	do		2455
2456	Do. *b*	13.57	1.36	9.38	71.14		4.55	1.6	10.8	82.3		5.3	do		2456
2457	White dent corn meal *b*	12.97	1.45	9.44	71.79		4.35	1.6	10.8	82.5		5.1	do		2457
2458	From 8-rowed yellow corn *b*	12.52	1.30	9.37	73.06		3.75	1.5	10.7	83.5		4.3	do		2458
2459	Yellow flint corn meal *b*	12.36	1.30	9.13	72.92		4.29	1.5	10.5	83.1		4.9	do		2459
2460	Do. *b*	9.58	1.70	10.44	73.46		4.82	1.9	11.5	81.3		5.3	do		2460
2461	Do. *b*	13.05	1.47	9.56	71.17		4.75	1.7	11.0	81.8		5.5	do		2461
2462	White flint corn meal *b*	10.29	1.21	8.88	76.53		3.09	1.3	9.9	85.4		3.4	do		2462
2463	Yellow dent corn meal *b*	13.11	1.12	8.75	72.37		4.65	1.3	10.1	83.2		5.4	do		2463
2464	Do. *b*	13.93	1.36	8.56	72.97		3.18	1.6	10.0	84.7		3.7	do		2464
2465	Western corn meal, coarse *b*	12.79	1.40	8.31	73.46		3.95	1.7	10.1	83.6		4.6	do		2465
2466	Do. *b*	11.79	1.53	9.56	73.01		4.11	1.7	10.8	82.9		4.6	do		2466
2467	Do. *b*	12.04	1.58	8.94	73.44		4.00	1.8	10.2	83.5		4.5	do		2467
2468	Corn meal, old and new mixed *b*	16.95	1.41	8.50	69.42		3.72	1.7	10.2	83.6		4.5	do		2468
2469	Do. *b*	14.93	1.46	9.44	69.95		4.22	1.7	11.1	82.3		4.9	do		2469
2470	New feed, Indian *b*	20.90	1.37	8.38	67.39		1.96	1.7	10.6	85.2		2.5	do		2470

* Adds 05.35

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	MILL PRODUCTS—Continued.													
	MILL PRODUCTS FROM CORN (MAIZE)—continued.	%	%	%	%	%	%	%	%	%	%	%		
2471	Corn (maize) meal	12.62	1.36	9.99	2.31	69.98	3.74	1.6	11.4	2.6	86.1	4.3	Mass. State Ex. Sta. Rep., 1885, p.21	2471
2472	Do	15.80	1.05	10.31	1.58	67.64	3.62	1.2	12.3	1.9	80.3	4.3	N. Y. State Ex. Sta. Rep., 1885, p. 305	2472
2473	Do	10.25	1.36	9.08	1.18	73.55	4.58	1.5	10.1	1.3	82.0	5.1	do	2473
2474	Do	12.88	1.38	9.90	2.81	68.87	4.16	1.6	11.4	3.2	79.0	4.8	do	2474
2475	Do	12.21	1.40	10.86	2.24	68.23	5.06	1.6	12.4	2.5	77.7	5.8	do	2475
2476	Do	8.01	1.38	9.55	2.14	73.95	4.97	1.5	10.4	2.3	80.4	5.4	do	2476
2477	Do	12.04	1.38	10.19	1.88	70.14	4.37	1.6	11.6	2.1	79.7	5.0	Conn. State Ex. Sta. Rep., 1885, p. 40	2477
2478	Do	13.12	1.42	10.00	1.75	69.21	4.50	1.6	11.5	2.0	79.7	5.2	do	2478
2479	Do	13.29	1.43	9.81	2.71	68.20	4.56	1.6	11.3	3.1	78.7	5.3	do	2479
2480	Do	14.24	1.55	9.50	1.28	70.80	2.63	1.8	11.1	1.5	82.5	3.1	do	2480
2481	Do	18.75	4.05	8.70	2.40	61.82	4.28	5.0	10.5	3.0	76.2	5.3	Wis. Ex. Sta. Rep., 1886, p. 99	2481
2482	From dent corn	18.00	1.40	10.00	2.10	64.42	4.08	1.7	12.2	2.6	78.6	5.0	Me. Ex. Sta. Rep., 1885–'86, p. 51	2482
2483	Do	20.95	1.50	9.44	2.14	61.72	4.25	1.9	11.9	2.7	78.1	5.4	do	2483
2484	From flint corn	18.25	1.45	8.25	1.86	66.03	4.16	1.7	10.1	2.2	80.9	5.1	do	2484
2485	Not described	25.55	0.88	7.36	2.64	60.41	3.16	1.2	9.9	3.5	81.2	4.2	N. Y. State Ex. Sta. Rep., 1886, p. 365	2485
2486	Very poor quality	27.41	1.27	8.75	2.26	57.02	3.29	1.7	12.5	3.1	78.2	4.5	do	2486
2487	Not described	16.96	1.39	8.56	1.98	66.92	4.19	1.7	10.3	2.4	80.6	5.0	do	2487
2488	Do	23.14	1.11	8.65	1.67	61.88	3.55	1.6	11.2	2.2	80.4	4.6	do	2488
2489	Heated	22.56	1.71	9.83	2.42	61.53	1.95	2.2	12.7	3.1	79.5	2.5	do	2489
2490	Not described	12.63	1.38	8.93	2.10	70.60	4.36	1.6	10.2	2.4	80.8	5.0	Mo. Agr. Col. Farm Bul. 27, 1887, p. 6	2490
2491	Do	12.62	1.36	9.99	2.32	69.98	3.73	1.5	11.4	2.7	80.1	4.3	Mass. State Ex. Sta. Rep., 1887, p. 85	2491
2492	Do	11.95	1.41	11.53	2.29	68.95	3.87	1.6	13.1	2.6	78.3	4.4	Mass. State Ex. Sta. Rep., 1887, p. 52	2492
2493	Do	13.08	1.45	9.03	3.03	69.19	4.22	1.6	10.4	3.5	79.5	5.0	do	2493
2494	Do	11.68	1.38	9.13	2.15	71.48	4.18	1.5	10.3	2.4	81.1	4.7	Mass. State Ex. Sta. Rep., 1887, p.105	2494
2495	Do	12.98	1.52	8.76	2.98	69.34	4.42	1.7	10.1	3.4	79.7	5.1	do	2495
2496	Do	13.18	1.36	9.31	3.09	68.83	4.22	1.6	10.7	3.6	79.3	4.8	Mass. State Ex. Sta. Rep., 1887, p.106	2496
2497	From Brazilian flour corn, raised in Connecticut.	11.86	1.82	8.51	1.89	70.98	4.94	2.1	9.7	2.1	80.5	5.6	Vt. Ex. Sta. Rep., 1887, p. 131	2497
2498	Not described	11.97	1.30	10.46	1.61	70.42	4.24	1.5	11.9	1.8	80.0	4.8	Mass. State Ex. Sta. Rep., 1888, p. 87	2498
2499	Do	12.78	1.38	9.73	1.48	71.17	3.46	1.6	11.0	1.7	81.7	4.0	Mass. State Ex. Sta. Rep., 1888, p. 49	2499
2500	Do	13.59	1.45	9.00	1.35	71.93	2.68	1.7	10.4	1.5	83.3	3.1	Mass. State Ex. Sta. Rep., 1888, p. 82	2500
2501	Do	12.07	1.25	8.42	2.05	71.74	4.47	1.4	9.6	2.4	81.5	5.1	Ark. Ex. Sta. Rep., 1888, p. 133	2501
2502	From yellow dent corn *a*	12.92	1.20	9.22	2.67	70.23	3.76	1.4	10.6	3.1	80.6	4.3	Wis. Ex. Sta. Rep., 1888, p. 31	2502
2503	Not described	11.77	1.44	10.19	2.60	72.38	2.22	1.6	11.6	2.3	82.0	2.5	Vt. Ex. Sta. Rep., 1888, p. 76	2503
2504	From new corn, analyzed in December	17.42	1.26	8.00	1.38	68.65	3.29	1.5	9.6	1.7	83.2	4.0	Conn. State Ex. Sta. Rep., 1888, p.150	2504

2505	From old corn, analyzed in December	14.61	1.18	8.87	1.35	69.96	4.03	1.4	10.3	1.6	82.0	4.7	do	2505
2506	Not described *a*	19.08	1.12	9.51	1.47	65.12	3.70	1.4	11.8	1.8	80.4	4.6	N. Y. State Ex. Sta. Rep., 1888, p. 238	2506
2507	Do	12.80	1.22	9.66	1.65	70.92	3.60	1.4	11.1	1.9	81.4	4.2	Mass. State Ex. Sta. Rep., 1889, p. 31	2507
2508	Do	16.44	1.67	10.27	1.75	66.95	2.92	2.0	12.3	2.1	80.1	3.5	Mass. State Ex. Sta. Rep., 1889, p.125	2508
2509	Do	12.13	1.31	9.14	1.58	71.98	3.86	1.5	10.4	1.8	81.9	4.4	do	2509
2510	Do	10.71	0.89	9.10	1.52	74.03	3.75	1.0	10.2	1.7	82.9	4.2	Mass. State Ex. Sta. Rep., 1889, p.126	2510
2511	Do	11.98	1.40	10.38	1.58	70.53	4.13	1.6	11.8	1.8	80.1	4.7	do	2511
2512	Do	13.36	1.13	9.35	1.99	71.40	2.77	1.3	10.8	2.3	82.4	3.2	Mass. State Ex. Sta. Rep., 1889, p.127	2512
2513	Do	15.51	1.35	9.80	1.44	68.01	3.80	1.6	11.7	1.7	80.5	4.5	do	2513
2514	Do	11.32	1.33	9.13	1.06	73.35	3.81	1.5	10.3	1.2	82.7	4.3	Mass. State Ex. Sta. Rep., 1889, p.128	2514
2515	Do	10.05	1.44	9.90	1.17	73.66	3.78	1.6	11.0	1.3	81.9	4.2	do	2515
2516	Do	13.90	1.50	10.17	1.81	68.37	4.25	1.8	11.8	2.1	79.4	4.9	N. H. Ex. Sta. Bul. 8, 1889, p. 10	2516
2517	Do. *a d*	19.96	1.28	8.32	1.84	65.96	2.64	1.6	10.4	2.3	82.4	3.3	Wis. Ex. Sta. Rep., 1889, p. 73	2517
2518	Do	15.29	2.00	8.87	2.45	68.11	3.28	2.4	10.4	3.0	89.3	3.9	Miss. Ex. Sta. Bul. 8, 1889, p. 6	2518
	All complete analyses: Maximum	27.41	4.05	13.94	3.09	73.06	5.06	5.0	16.8	3.6	84.8	5.8		
	All complete analyses: Minimum	8.01	0.88	7.11	0.50	60.41	1.95	1.0	8.1	0.6	73.2	2.5		
	All complete analyses: Average	**14.08**	**1.42**	**9.17**	**1.90**	**68.76**	**3.77**	**1.6**	**10.8**	**2.2**	**81.0**	**4.4**		
	Corn (maize) and cob meal:											4.5	N. J. Ex. Sta. Rep., 1881, p. 53	2519
2519	Not described	12.68	1.19	7.06	6.47	68.68	3.92	1.4	8.1	7.4	78.6	3.4	Mass. State Ex. Sta. Rep., 1883, p. 67	2520
2520	Do	19.07	1.30	12.19	7.91	56.75	2.78	1.6	15.1	9.8	70.1			
												2.5	N. J. Ex. Sta. Rep., 1885, p. 164	2521
2521	White flint *b*	12.95	1.48	7.63	75.75		2.10	1.7	8.7	87.1		3.3	do	2522
2522	White and yellow corn meal with cob *b*	11.95	1.33	6.69	77.15		2.88	1.5	7.6	87.6		1.8	do	2523
2523	New corn *b*	24.22	1.26	7.79	65.35		1.38	1.7	10.3	86.2		2.5	do	2524
2524	Not described	35.15	1.27	5.50	56.34		1.74	2.0	8.5	87.0		4.3	Me. Ex. Sta. Rep., 1885–'86, p. 51	2525
2525	Do	12.60	1.90	7.81	9.35	64.55	3.79	2.2	8.9	10.7	73.9	5.2	Mass. State Ex. Sta. Rep., 1886, p. 41	2526
2526	Do	9.45	1.49	8.92	5.72	69.72	4.70	1.6	9.9	6.3	77.0	3.4	Mass. State Ex. Sta. Rep., 1888, p. 85	2527
2527	Do. *c*	26.34	1.20	5.76	4.65	59.57	2.48	1.6	7.8	6.3	80.9	3.7	do	2528
2528	Do	13.69	1.45	7.88	6.69	67.12	3.17	1.7	9.1	7.8	77.7		Indiana Ex. Sta. Bul. 24, 1889	2529
2529	Do	11.75	1.69	9.58	5.56	67.55	3.87							
	All complete analyses: Maximum	26.34	1.90	12.19	9.35	69.72	4.70	2.2	15.1	10.7	80.9	5.2		
	All complete analyses: Minimum	9.45	1.19	5.76	4.65	56.75	2.48	1.4	7.6	6.3	70.1	1.8		
	All complete analyses: Average	**15.08**	**1.46**	**8.45**	**6.62**	**64.86**	**3.53**	**1.7**	**10.0**	**7.8**	**76.4**	**4.1**		
2530	Hominy, from Southern corn	13.62	0.37	8.08	0.33	77.18	0.42	0.4	9.3	0.4	89.4	0.5	U. S. Census, 1880, vol. III, p. 420	2530
2531	Hominy	13.36	0.39	8.41	0.31	77.07	0.46	0.5	9.7	0.4	88.9	0.5	do	2531
	Cracked corn (maize):											4.4	N. J. Ex. Sta. Rep., 1885, p. 164	2532
2532	Not described	12.25	1.27	8.63	73.94		3.91	1.5	9.8	84.3		5.2	do	2533
2533	New *b*	18.34	1.46	8.75	67.20		4.25	1.8	10.7	82.3		4.0	Mass. State Ex. Sta. Rep., 1887, p. 106	2534
2534	Chits removed	13.58	2.25	9.51	2.76	68.44	3.46	2.6	11.0	3.2	79.2			
	MILL PRODUCTS FROM SORGHUM.													
2535	Sorghum seed meal, mostly decorticated	13.16	1.59	8.25	1.88	71.27	3.85	1.8	9.4	2.2	82.1	4.5	N. J. Ex. Sta. Rep., 1882, p. 70	2535
2536	Broom-corn-seed meal	13.54	2.08	9.68	6.92	64.24	3.54	2.4	11.2	8.0	74.3	4.1	Mass. State Ex. Sta. Rep., 1887, p. 100	2536

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	MILL PRODUCTS—Continued.													
	MILL PRODUCTS FROM OATS.	%	%	%	%	%	%	%	%	%	%	%		
2537	Ground oats	13.26	2.94	10.30	19.37	50.75	3.38	3.4	11.9	22.3	58.5	3.9	N. Y. State Ex. Sta. Rep., 1885, p. 305	2537
2538	Do	10.09	3.24	11.63	16.57	53.98	4.49	3.6	12.9	18.4	60.1	5.0	do	2538
	Oatmeal:													
2539	From Ireland	8.84	1.81	12.87	0.66	67.05	8.77	2.0	14.1	0.7	73.6	9.6	U. S. Census, 1880, vol. III, p. 421	2539
2540	C. Akron, from Ohio	6.23	1.99	14.87	0.83	68.99	7.09	2.1	15.9	0.9	73.5	7.6	do	2540
2541	Hickory Nut, from New York	8.22	1.98	14.19	0.79	68.22	6.60	2.2	15.5	0.8	74.3	7.2	do	2541
2542	Silver Medal, from New York	8.13	2.17	15.13	1.15	66.62	6.80	2.4	16.5	1.2	72.5	7.4	do	2542
2543	Pin Head, from New York	8.18	1.86	16.25	0.64	67.02	6.05	2.0	17.7	0.7	73.0	6.6	do	2543
2544	Brand unknown, from New York	7.52	2.23	14.63	1.10	67.45	7.07	2.4	15.8	1.2	72.9	7.7	do	2544
	Maximum	8.84	2.23	16.25	1.15	68.99	8.77	2.4	17.7	1.2	74.3	9.6		
	Minimum	6.23	1.81	12.87	0.64	66.62	6.05	2.0	14.1	0.7	72.5	6.6		
	Average	**7.85**	**2.01**	**14.66**	**0.86**	**67.56**	**7.06**	**2.2**	**15.9**	**1.0**	**73.2**	**7.7**		
	MILL PRODUCTS FROM BARLEY.													
2545	Barley meal	9.85	3.77	12.68	7.00	63.46	3.24	4.2	14.1	7.8	70.3	3.6	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27.	2545
2546	Do	12.19	1.58	9.83	6.51	67.96	1.93	1.8	11.2	7.4	77.4	2.2	Mass. State Ex. Sta. Rep., 1889, p. 139	2546
2547	Do	13.61	2.42	8.99	5.87	67.64	1.47	2.8	10.4	6.8	78.3	1.7	do	2547
	Average	**11.88**	**2.50**	**10.50**	**6.46**	**66.36**	**2.21**	**3.0**	**11.9**	**7.3**	**75.3**	**2.5**		
2548	Pearled barley, No. 3	11.82	0.98	8.44	0.32	77.76	0.68	1.1	9.6	0.4	88.1	0.8	U. S. Census, 1880, vol. III, p. 422	2548
	MILL PRODUCTS FROM RYE.													
2549	Rye flour, from Massachusetts	13.56	0.77	6.63	0.40	77.78	0.86	0.9	7.7	0.4	90.0	1.0	U. S. Census, 1880, vol. III, p. 423	2549
2550	Rye flour, from Connecticut	12.35	0.72	6.94	0.43	78.67	0.89	0.8	7.9	0.5	89.8	1.0	do	2550
2551	Rye flour	12.92	0.76	6.90	0.45	79.09	0.78	0.9	6.9	0.5	89.8	0.9	do	2551
2552	Rye flour, from New Jersey	13.58	0.64	7.05	0.35	77.56	0.82	0.7	8.1	0.4	89.8	1.0	do	2552
	Average	**13.10**	**0.72**	**6.65**	**0.41**	**78.28**	**0.84**	**0.8**	**7.7**	**0.4**	**90.2**	**0.9**		

2553	Ground rye *b*	13.22	1.66	9.50	73.82	1.80	2.0	10.9	85.0	2.1	N. J. Ex. Sta. Rep., 1885, p. 170	2553
2554	Do *b*	12.77	1.84	10.50	72.89	2.00	2.1	12.0	83.6	2.3	do	2554
2555	Clear rye feed *b*	11.35	1.85	10.25	74.96	1.59	2.1	11.5	84.6	1.8	do	2555
2556	Ground rye *b*	12.61	1.99	11.69	72.08	1.63	2.3	13.3	82.6	1.8	do	2556
2557	Do *b*	13.10	1.98	10.00	73.37	1.65	2.3	11.5	84.3	1.9	do	2557
	Average	**12.61**	**1.86**	**10.39**	**73.48**	**1.71**	**2.2**	**11.8**	**84.1**	**1.9**		
	MILL PRODUCTS FROM WHEAT.											
	Wheat flour, from spring wheat:											
2558	New process (raised in Connecticut)	13.50	0.42	10.92	74.04	1.12	0.5	12.6	85.6	1.3	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 35.	2558
2559	"Tea wheat flour" (raised in Kansas)	12.43	0.59	13.56	73.42		0.7	15.5	83.8		Mich. Bd. Agr. Rep., 1877, p. 350	2559
2560	Grass wheat flour (raised in Kansas)	11.92	0.59	13.31	74.18		0.7	15.1	84.2		do	2560
2561	Early May flour (raised in Kansas)	10.70	0.57	11.37	77.36		0.6	12.7	86.7		do	2561
2562	Blue Stem flour (raised in Kansas)	10.99	0.57	11.37	77.07		0.6	12.7	86.7		do	2562
2563	Mammoth Spring flour (raised in Kansas)	10.96	0.69	13.31	75.04		0.8	15.0	84.2		do	2563
2564	Patent Process (raised in Michigan)	10.31	0.60	10.94	78.15		0.7	12.2	87.1		do	2564
2565	Brand unknown (raised in Minnesota)	11.78	0.49	12.25	75.48		0.6	13.9	85.5		do	2565
2566	Do	12.80	0.55	12.50	74.15		0.6	14.3	85.1		do	2566
2567	No. 1 Flour (locality not given)	11.98	0.46	8.71	78.11	0.74	0.5	9.9	88.8	0.8	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 25.	2567
2568	No. 2 Flour (locality not given)	12.46	0.50	8.56	77.92	0.56	0.6	9.8	89.0	0.6	do	2568
2569	No. 3 Flour (locality not given)	10.30	0.55	9.59	78.52	1.04	0.6	10.7	87.5	1.2	do	2569
2570	New Process (locality not given)	12.79	0.50	12.31	0.07 | 73.14	1.19	0.6	14.1	0.1 | 83.8	1.4	Conn. State Ex. Sta. Rep., 1880, p. 81	2570
	All analyses of flour from spring wheat. Maximum	13.50	0.69	13.56	79.56		0.8	15.5	89.0			
	All analyses of flour from spring wheat. Minimum	10.30	0.42	8.56	73.42		0.5	9.8	83.8			
	All analyses of flour from spring wheat. Average	**11.76**	**0.54**	**11.44**	**76.26**		**0.6**	**13.0**	**86.4**			
	Wheat flour, from winter wheat:											
2571	Diehl (raised in Michigan)	8.28	0.62	10.94	80.16		0.7	11.9	87.4		Mich. Bd. Agr. Rep., 1877, p. 350	2571
2572	Do	8.29	0.65	9.71	80.35		0.7	10.7	88.6		do	2572
2573	Soule (raised in Michigan)	10.65	0.62	10.00	78.73		0.7	11.2	88.1		do	2573
2574	Fultz (raised in Michigan)	9.69	0.66	8.94	80.71		0.7	9.9	89.4		do	2574
2575	Treadwell (raised in Michigan)	10.46	0.66	10.63	78.25		0.7	11.9	87.4		do	2575
2576	Buckeye (raised in Michigan)	10.66	0.63	9.69	79.02		0.7	10.9	88.4		do	2576
2577	Asiatic (raised in Michigan)	9.66	0.64	11.00	78.70		0.7	12.2	87.1		do	2577
2578	Gold Medal (raised in Michigan)	9.56	0.67	9.80	79.97		0.7	10.8	88.5		do	2578
2579	Do	9.66	0.64	11.01	78.69		0.7	12.2	87.1		do	2579
2580	Egyptian Red (raised in Michigan)	9.71	0.66	10.75	78.88		0.7	11.9	87.4		do	2580
2581	Claweon (raised in Michigan)	9.93	0.69	11.25	78.19		0.7	12.5	86.8		do	2581
2582	Do	10.69	0.64	9.62	79.05		0.7	10.8	88.5		do	2582
2583	Weeks (raised in Michigan)	9.10	0.65	10.50	79.75		0.7	11.6	87.7		do	2583
2584	Powers (raised in Michigan)	10.15	0.48	11.59	77.78		0.5	12.9	86.6		do	2584
2585	Armstrong (raised in Michigan)	12.61	0.63	12.25	74.51		0.7	14.0	85.3		do	2585
2586	Tuscan (raised in Michigan)	13.43	0.72	10.94	74.91		0.8	12.6	86.6		do	2586

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	MILL PRODUCTS—Continued.													
	MILL PRODUCTS FROM WHEAT—continued.													
	Wheat flour, from winter wheat—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2587	Patent Process (raised in Michigan)	10.31	0.60	10.94		78.15		0.7	12.2		87.1		Mich. Bd. Agr. Rep., 1877, p. 350	2587
2588	Snow Flake (raised in Michigan)	12.96	0.53	8.56	0.17	76.59	1.19	0.6	9.8	0.2	88.0	1.4	U. S. Census, 1880, vol. III, p. 416	2588
	All analyses of flour from winter wheat. Maximum	13.43	0.72	12.25		80.71		0.8	12.9		89.6			
	Minimum	8.28	0.48	8.50		74.51		0.5	9.8		85.3			
	Average	**10.38**	**0.63**	**10.45**		**78.54**		**0.7**	**11.7**		**87.6**			
	Wheat flour, unclassified:													
2589	Early Riser (raised in Illinois)	12.22	0.41	9.69	0.10	76.65	0.93	0.5	11.0	0.1	87.3	1.1	do	2589
2590	Washburn's Superlative (raised in Minnesota)	13.17	0.43	12.13	0.08	73.15	1.04	0.5	14.0	0.1	84.2	1.2	do	2590
2591	Do	12.67	0.34	12.50	0.07	73.48	0.94	0.4	14.3	0.1	84.1	1.1	do	2591
2592	Washburn's (raised in Minnesota)	13.10	0.35	11.75	0.06	73.70	1.04	0.4	13.5	0.1	84.8	1.2	do	2592
2593	Christian's (raised in Minnesota)	12.52	0.40	12.16	0.07	73.80	1.05	0.5	13.9	0.1	84.3	1.2	do	2593
2594	Straight (raised in Minnesota)	12.16	0.58	13.31	0.15	72.63	1.17	0.7	15.1	0.2	82.7	1.3	do	2594
2595	Palisade (raised in Minnesota)	12.02	0.41	10.44	0.08	76.24	0.81	0.5	11.9	0.1	86.6	0.9	do	2595
2596	Patent (raised in Missouri)	11.19	0.52	10.00	0.13	76.93	1.23	0.6	11.3	0.1	86.6	1.4	do	2596
2597	Perfection (raised in Missouri)	11.26	0.38	11.06	0.09	76.13	1.08	0.4	12.6	0.1	85.8	1.2	do	2597
2598	White Silk (raised in Missouri)	12.05	0.45	9.69	0.11	76.61	1.09	0.5	11.0	0.1	87.2	1.2	do	2598
2599	New Hampton (raised in New Jersey)	12.80	0.69	11.56	0.22	73.43	1.30	0.8	13.3	0.2	84.2	1.5	do	2599
2600	Queen Bee (raised in New York)	12.14	0.56	11.63	0.09	74.32	1.26	0.6	13.3	0.1	84.6	1.4	do	2600
2601	Hill's XXXX (raised in New York)	13.04	0.50	10.54	0.14	74.62	1.16	0.6	12.1	0.2	85.8	1.3	do	2601
2602	Blue Jacket (raised in New York)	12.60	0.52	10.45	0.14	75.09	1.20	0.6	12.0	0.1	85.9	1.4	do	2602
2603	Straight (raised in New York)	13.02	0.59	9.87	0.16	75.17	1.19	0.7	11.4	0.2	86.3	1.4	do	2603
2604	"Baking Flour" (raised in Wisconsin)	12.74	0.48	11.88	0.09	73.67	1.14	0.6	13.6	0.1	84.4	1.3	do	2604
2605	Patent	12.32	0.34	10.68	0.33	75.28	1.05	0.4	12.1	0.4	85.9	1.2	U. S. Dept. Agr. Bul. 4, p. 40	2605
2606	Bakers	11.98	0.60	13.13	1.00	71.52	1.77	0.6	15.0	1.1	81.3	2.0	do	2606
2607	Patent	13.59	0.36	10.68	0.35	73.94	1.08	0.4	12.3	0.4	85.7	1.2	do	2607
2608	Low-Grade	12.36	0.69	9.98	0.93	75.04	1.00	0.8	11.4	1.0	85.7	1.1	do	2608
	All complete analyses of wheat flour. Maximum	13.59	0.72	13.56	1.00	78.52	1.77	0.8	15.1	1.1	87.3	2.0		
	Minimum	8.28	0.34	8.56	0.07	71.52	0.56	0.4	11.0	0.1	81.3	0.9		
	Average	**12.42**	**0.48**	**10.84**	**0.18**	**74.99**	**1.09**	**0.5**	**12.3**	**0.2**	**85.8**	**1.2**		

	Graham flour:													
2609	Rochester	12.06	1.97	12.44	1.83	69.80	1.90	2.2	14.2	2.1	79.3	2.2	U. S. Census, 1880, vol. III, p. 417	2609
2610	Honeoye	13.52	1.68	11.31	1.99	70.00	1.50	1.9	13.1	2.3	81.0	1.7	do	2610
2611	Kelly's No. 1	13.69	1.67	11.25	1.78	69.89	1.72	1.9	13.0	2.1	81.0	2.0	do	2611
	Average	**13.00**	**1.77**	**11.67**	**1.87**	**69.89**	**1.71**	**2.1**	**13.4**	**2.2**	**80.3**	**2.0**		
	Entire wheat flour:													
2612	WWWW brand	13.09	1.45	13.07	0.99	69.52	1.88	1.6	15.0	1.1	80.1	2.2	U. S. Census, 1880, vol. III, p. 416	2612
2613	Do	12.89	1.44	14.12	1.22	68.32	2.01	1.7	16.2	1.4	78.4	2.3	Conn. State Ex. Sta. Rep., 1880, p. 86	2613
	PRODUCTS OF ROLLER MILLING.*													
	C. A. Pillsbury & Co., Minneapolis:													
2614	Wheat as it enters the mill	9.66	1.91	14.18	1.70	69.94	2.61	2.1	15.7	1.9	77.4	2.9	U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 38.	2614
2615	Wheat prepared for the rolls	9.07	1.79	14.35	1.68	70.37	2.74	2.0	15.8	1.9	77.3	3.0	do	2615
2616	Cockle and screenings	9.03	2.65	13.65	4.23	66.12	4.32	3.0	15.0	4.6	72.7	4.7	do	2616
2617	Scourings removed by cleaners	9.27	3.68	11.55	1.58	70.19	3.73	4.1	12.7	1.8	77.3	4.1	do	2617
2618	First break	8.23	1.73	14.18	1.62	71.56	2.68	1.9	15.5	1.7	78.0	2.9	do	2618
2619	Chop from first break	12.52	0.88	12.95	1.13	70.44	2.08	1.0	14.8	1.3	80.5	2.4	do	2619
2620	Second break	8.37	2.04	14.00	1.65	71.47	2.47	2.2	15.3	1.9	77.9	2.7	do	2620
2621	Chop from second break	12.78	0.57	12.60	0.55	71.82	1.68	0.7	14.4	0.6	82.4	1.9	do	2621
2622	Third break	9.92	2.55	15.05	2.13	65.10	5.25	2.9	16.7	2.3	72.2	5.9	do	2622
2623	Chop from third break	12.70	0.78	12.78	0.78	71.10	1.86	0.9	14.7	0.9	81.3	2.2	do	2623
2624	Fourth break	8.18	3.30	15.23	3.00	66.20	4.09	3.6	16.6	3.3	72.0	4.5	do	2624
2625	Chop from fourth break	12.35	1.47	14.18	1.23	67.90	2.87	1.7	16.2	1.4	77.4	3.3	do	2625
2626	Fifth break	7.62	5.16	15.75	4.80	61.76	4.91	5.6	17.0	5.2	66.9	5.3	do	2626
2627	Chop from fifth break	11.91	1.99	15.75	1.73	64.46	4.16	2.3	17.8	1.9	73.2	4.8	do	2627
2628	Sixth break	7.66	5.68	16.28	5.60	59.42	5.34	6.2	17.6	6.1	64.4	5.7	do	2628
2629	Chops from sixth break	11.84	3.29	17.68	3.18	59.09	4.92	3.7	20.0	3.6	67.1	5.6	do	2629
2630	Bran	10.91	5.59	16.28	5.98	56.21	5.03	6.3	18.3	6.7	63.1	5.6	do	2630
2631	Shorts	10.94	3.41	16.80	3.90	60.28	4.67	3.8	18.8	4.4	67.7	5.3	do	2631
	Middlings, uncleaned—													
2632	No. 1	12.71	1.27	13.48	1.03	68.78	2.73	1.5	15.4	1.2	78.8	3.1	do	2632
2633	No. 2	12.18	1.04	13.30	0.83	70.49	2.16	1.2	15.1	1.0	80.3	2.4	do	2633
2634	No. 3	12.27	0.70	13.13	0.58	71.52	1.80	0.8	15.0	0.6	81.5	2.1	do	2634
2635	No. 4	12.47	0.68	13.83	0.58	70.69	1.75	0.8	15.8	0.6	80.7	2.1	do	2635
2636	No. 5	12.34	0.61	14.53	0.53	70.24	1.75	0.7	16.5	0.6	80.2	2.0	do	2636
	Middlings, cleaned—													
2637	No. 1	12.67	1.07	13.13	0.85	70.16	2.12	1.2	15.0	1.0	80.4	2.4	do	2637
2638	No. 2	9.93	0.65	12.78	0.65	74.09	1.90	0.7	14.1	0.7	82.4	2.1	do	2638
2639	No. 3	12.36	0.59	13.13	0.55	71.67	1.70	0.7	15.0	0.6	81.8	1.9	do	2639
2640	No. 4	12.51	0.52	13.30	0.33	71.57	1.77	0.6	15.2	0.4	81.7	2.1	do	2640
2641	No. 5	12.35	0.51	14.35	0.43	70.74	1.62	0.6	16.4	0.5	80.7	1.8	do	2641
	Middlings, reduction on smooth rolls—													
2642	First	12.64	0.82	12.60	0.58	70.80	2.56	1.0	14.4	0.7	81.0	2.9	do	2642
2643	Chop from first	12.74	0.72	12.25	0.58	71.72	1.99	0.8	14.0	0.7	82.2	2.3	do	2643
2644	Second												do	2644
2645	Chop from second	12.48	0.57	13.65	0.38	71.24	1.68	0.7	15.5	0.4	81.5	1.9	do	2645
2646	Third	12.29	0.61	12.78	0.55	71.91	1.86	0.7	14.5	0.6	82.0	2.2	do	2646

* In *loc cit.*, phosphoric acid and moist and dry gluten given on all the samples.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	MILL PRODUCTS—Continued.													
	PRODUCTS OF ROLLER MILLING—continued.													
	C. A. Pillsbury & Co., Minneapolis—Continued													
	Middlings, reduction on smooth rolls—cont'd.	%	%	%	%	%	%	%	%	%	%	%		
2647	Chop from third	12.73	0.79	12.60	0.58	71.29	2.01	0.9	14.4	0.7	81.7	2.3	U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 38.	2647
2648	Fourth	11.43	0.56	12.60	0.43	73.12	1.86	0.7	14.1	0.5	82.6	2.1	do	2648
2649	Chop from fourth	11.72	0.50	13.13	0.33	72.56	1.76	0.6	14.8	0.4	82.2	2.0	do	2649
2650	Fifth	12.21	0.65	12.78	0.43	71.85	2.08	0.7	14.5	0.5	81.9	2.4	U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 39.	2650
2651	Chop from fifth	11.47	0.56	12.78	0.50	72.66	2.03	0.6	14.5	0.6	82.0	2.3	do	2651
	Flour from reduction of middlings—													
2652	First	12.03	0.39	12.05	0.25	73.70	1.58	0.4	13.7	0.3	83.8	1.8	do	2652
2653	Second*	12.42	0.44	12.60	0.33	72.55	1.66	0.5	14.4	0.4	82.7	2.0	do	2653
2654	Third	11.54	0.38	11.20	0.28	75.24	1.38	0.4	12.6	0.3	85.1	1.6	do	2654
2655	Fourth	11.58	0.40	13.30	0.38	72.92	1.42	0.4	15.0	0.4	82.6	1.6	do	2655
2656	Fifth	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	do	2656
	Tailings from middlings purifiers—													
2657	No. 1	12.33	3.30	16.10	3.25	60.06	4.96	3.8	18.3	3.8	68.4	5.7	do	2657
2658	Nos. 2, 3, and 4	11.58	3.69	14.53	.....	.....	3.92	3.5	16.4	.....	.....	4.4	do	2658
2659	No. 6	12.00	0.90	14.53	1.10	69.10	2.37	1.0	16.4	1.3	78.6	2.7	do	2659
	Tailings from reductions—													
2660	First	11.78	3.26	16.98	2.63	60.32	5.03	3.7	19.3	2.9	68.4	5.7	do	2660
2661	Second	10.35	3.38	19.95	2.08	59.87	4.37	3.8	22.3	2.3	66.7	4.9	do	2661
2662	Third	11.72	2.35	16.63	1.66	63.27	4.37	2.7	18.8	1.9	71.6	5.0	do	2662
2663	Fourth	12.69	0.88	14.00	0.40	68.47	4.16	1.2	16.0	0.4	77.7	4.7	do	2663
2664	Fifth	12.12	2.29	16.63	1.18	63.93	3.85	2.6	18.8	1.4	72.8	4.4	do	2664
2665	Repurified middlings	11.72	2.11	14.88	1.63	65.99	3.67	2.4	16.9	1.8	74.6	4.3	do	2665
	Finished flour—													
2666	Bakers	12.18	0.62	14.88	0.33	69.99	2.00	0.7	17.0	0.4	79.5	2.4	do	2666
2667	Patent	11.48	0.39	12.95	0.18	73.55	1.45	0.4	14.7	0.2	83.0	1.7	do	2667
2668	Low-grade	12.01	1.99	17.95	0.93	63.26	3.86	2.3	20.4	1.1	71.8	4.4	do	2668
2669	Break flour	12.48	0.58	15.40	0.23	69.44	1.87	0.7	17.5	0.3	79.3	2.2	do	2669
2670	Stone flour	12.04	0.49	12.78	0.23	72.85	1.61	0.5	14.6	0.3	82.8	1.8	do	2670
	Flour from tailings—													
2671	First	12.55	0.62	13.30	0.35	70.25	2.93	0.7	15.1	0.4	80.4	3.4	do	2671
2672	Second*	11.20	0.76	13.65	0.48	72.28	2.63	0.8	15.1	0.5	81.4	2.9	do	2672
2673	Third	12.56	0.35	13.13	0.53	70.26	2.79	0.9	15.0	0.6	80.3	3.2	do	2673

2674	Cockle chop	12.45	2.79	12.78	3.48	64.01	4.34	3.2	14.6	4.1	73.1	5.0	do	2674
2675	Cockle bran	7.71	3.46	10.56	9.03	65.46	3.84	3.8	11.3	9.8	71.0	4.1	do	2675
2676	First germ	8.69	3.42	24.13	1.23	53.28	9.35	3.7	26.4	1.3	58.4	10.2	do	2676
2677	Second germ	8.76	5.45	33.25	1.75	35.19	15.61	6.0	36.5	2.0	38.5	17.0	do	2677
2678	Third germ	7.68	4.94	32.88	1.50	39.25	13.75	5.4	36.6	1.6	42.6	14.8	do	2678
2679	Bran duster flour	11.78	1.17	13.65	0.50	70.20	2.70	1.4	15.4	0.6	79.5	3.1	do	2679
	Stone stock—													
2680	No. 2*	12.15	0.40	13.65	0.25	72.91	1.64	0.5	15.4	0.3	82.0	1.8	do	2680
2681	No. 3	12.01	0.55	13.13	0.43	71.76	2.12	0.6	14.9	0.5	81.6	2.4	do	2681
	Tailings—													
2682	From sixth break	11.64	2.29	15.75	1.95	64.31	4.06	2.6	17.8	2.3	72.7	4.6	do	2682
2683	From first centrifugal reel	11.42	2.15	15.23	1.20	66.56	3.44	2.6	17.0	1.4	75.3	3.8	do	2683
2684	From second centrifugal reel	11.67	2.85	17.33	2.20	61.82	4.73	3.3	19.5	2.5	69.4	5.3	do	2684
2685	Tail end of tailings	11.36	3.87	15.75			5.23	4.4	17.8			5.9	do	2685
2686	Dust from No. 1 middlings	11.03	1.83	14.35	5.20	64.86	2.73	2.0	16.1	5.9	73.0	3.0	do	2686
2687	Dust from dust catcher	11.53	1.17	14.00	1.65	69.61	2.64	1.4	15.8	1.9	78.0	2.9	do	2687
	Herr & Cissel, Georgetown, D. C.:													
2688	Mixed wheat, clean	9.62	1.93	12.78	1.55	71.83	2.29	2.1	14.0	1.7	79.7	2.5	do	2688
2689	First break	8.13	2.03	13.48	1.60	72.30	2.46	2.2	14.8	1.7	78.6	2.7	do	2689
2690	Second break	9.47	2.00	13.13	1.58	71.81	2.01	2.2	14.5	1.8	79.3	2.2	do	2690
2691	Third break	8.79	2.03	13.13	1.70	71.98	2.37	2.2	14.5	1.9	78.8	2.6	do	2691
2692	Fourth break	8.91	2.39	13.65	1.75	70.97	2.33	2.6	14.9	2.0	78.0	2.5	U. S. Dept. Agr., Div. of Chem. Bul. 4, 1884, p. 40.	2692
2693	Fifth break	7.18	3.46	15.40				3.7	16.6				do	2693
2694	Sixth break	9.38	4.76	16.10				5.3	17.7				do	2694
2695	First middling	11.96	0.49	10.68	0.35	75.30	1.22	0.5	12.1	0.4	85.6	1.4	do	2695
2696	Second middling	11.89	0.51	10.50	0.33	75.56	1.21	0.5	11.9	0.4	85.8	1.4	do	2696
2697	Third middling	10.88	0.50	11.73	0.25	75.45	1.19	0.6	13.0	0.3	84.8	1.3	do	2697
2698	First middling, through smooth rolls	9.87	1.84	13.13	1.18	71.98	2.00	2.0	14.6	1.3	79.9	2.2	do	2698
2699	Patent flour	12.98	0.32	9.98	0.20	75.60	0.92	0.4	11.6	0.2	86.7	1.1	do	2699
2700	Bakers' flour	13.29	0.47	11.03	1.50	72.45	1.26	0.5	12.8	1.7	83.6	1.4	do	2700
2701	Low-grade flour	12.59	1.05	14.18	0.75	69.10	2.33	1.2	10.2	0.8	79.2	2.6	do	2701
2702	Germ middlings	11.10	2.41	14.53	1.63	66.59	3.74	2.7	16.3	1.8	75.0	4.2	do	2702
2703	Feed middlings or tailings	8.53	3.75	16.45	4.10	62.21	4.96	4.0	18.0	4.5	68.0	5.5	do	2703
2704	Bran middlings	8.24	6.89	16.45	6.13	56.77	5.52	7.5	18.0	6.6	61.9	6.0	do	2704
	Warder & Barnett, Springfield, Ohio:													
2705	Wheat	9.05	2.06	12.43	2.33	71.67	2.46	2.2	13.7	2.5	78.9	2.7	do	2705
2706	Patent flour	12.32	0.34	10.68	0.33	75.28	1.05	0.4	12.1	0.4	85.9	1.2	do	2706
2707	Bakers' flour	11.98	0.60	13.13	1.60	71.52	1.77	0.7	14.8	1.2	81.3	2.0	do	2707
2708	Low-grade flour	12.36	0.69	9.98	0.93	75.04	1.00	0.8	11.4	1.1	85.5	1.2	do	2708
2709	Middlings	8.49	4.28	17.50	3.15	60.64	5.94	4.7	19.1	3.7	66.0	0.5	do	2709
2710	Bran	7.74	6.99	15.40			4.90	7.6	16.7			5.4	do	2710
2711	Patent flour, second sample	13.59	0.38	10.68	0.35	73.94	1.08	0.4	12.4	0.4	85.6	1.2	do	2711
	MILL PRODUCTS FROM RICE.													
2712	Rice flour	3.66	10.71	4.68	28.31	50.90	1.74	11.1	4.8	29.4	52.9	1.8	N. C. Ex. Sta. Rep., 1882, p. 91	2712
2713	Rice meal	15.11	6.03	9.25	8.12	59.88	1.61	7.1	16.9	9.6	76.5	1.9	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27.	2713

* Adds 101 (fresh or air-dry material).

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	MILL PRODUCTS—Continued.													
	MILL PRODUCTS FROM MISCELLANEOUS SEEDS.													
	Buckwheat flour:	%	%	%	%	%	%	%	%	%	%	%		
2714	From Massachusetts	14.94	0.65	4.18	0.21	79.37	0.65	0.7	4.9	0.3	93.3	0.8	U. S. Census, 1880, vol. III, p. 423	2714
2715	From Connecticut	12.84	1.26	8.00	0.35	75.81	1.74	1.5	9.2	0.4	86.9	2.0	do	2715
2716	Locality unknown	12.78	1.26	7.25	0.27	76.85	1.59	1.5	8.3	0.3	88.1	1.8	do	2716
2717	Do. *b*	16.19	0.52	4.19	78.42		0.64	0.6	5.0	93.7		0.7		
2718	Do. *b*	15.82	0.51	3.88	79.16		0.63	0.6	4.6	94.1		0.7	N. J. Ex. Sta. Rep., 1885, p. 168	2717
2719	Do	17.63	0.83	8.13	0.52	71.10	1.79	1.0	9.8	0.6	86.6	2.0	do	2718
	Average, all complete analyses	**14.55**	**1.00**	**6.89**	**0.34**	**75.78**	**1.44**	**1.2**	**8.0**	**0.4**	**88.8**	**1.6**	Conn. State Ex. Sta. Rep., 1886, p. 111	2719
2720	Buckwheat farina	11.23	0.41	3.31	0.13	84.64	0.28	0.5	3.7	0.2	95.3	0.3	U. S. Census, 1880, vol. III, p. 423	2720
2721	Buckwheat groats	10.61	0.57	4.82	0.28	83.13	0.59	0.6	5.4	0.3	93.0	0.7	do	2721
2722	Ground linseed *b*	8.82	3.62	25.75	28.24		33.57	4.0	28.2	31.1		36.7	N. J. Ex. Sta. Rep., 1885, p. 172	2722
2723	Do. *b*	7.77	4.44	22.31	33.79		31.69	4.8	24.2	36.7		34.3	do	2723
2724	Do	8.33	3.36	22.97	9.60	25.48	30.26	3.7	25.1	10.5	27.7	33.0	N. Y. State Ex. Sta. Rep., 1885, p. 306	2724
2725	Do	7.89	6.08	20.31	5.01	30.21	30.50	6.6	22.0	5.4	33.0	33.0	Ontario Agr. Col. Bul. 34, 1888	2725
	Average, Nos. 2724 and 2725	**8.11**	**4.72**	**21.64**	**7.30**	**27.85**	**30.38**	**5.1**	**23.4**	**8.1**	**30.4**	**33.0**		
2726	Pea meal *b*	11.35	2.50	26.56	57.02		1.97	2.8	29.9	65.0		2.3	N. J. Ex. Sta. Rep., 1885, p. 166	2726
2727	Do	12.08	2.61	21.37	11.06	52.02	0.86	3.0	24.3	12.6	59.1	1.0	N. Y. State Ex. Sta. Rep., 1885, p. 305	2727
2728	Do. *c*	8.85	2.67	19.10	17.70	50.17	1.51	2.9	21.0	19.4	55.0	1.7	Mass. State Ex. Sta. Rep., 1887, p. 101	2728
2729	Do	7.07	3.13	24.35	3.81	60.96	0.09	3.4	26.2	4.1	66.2	0.1	Wis. Ex. Sta. Rep., 1888, p. 141	2729
	Average, Nos. 2727 and 2728	**10.46**	**2.64**	**20.23**	**14.38**	**51.10**	**1.19**	**2.9**	**22.5**	**16.0**	**57.2**	**1.4**		

	MIXED FEED.													
2730	Corn and oats *b*	13.65	2.12	9.13		71.57	3.53	2.4	10.6		82.9	4.1	N. J. Ex. Sta. Rep., 1885, p. 170	2730
2731	Equal parts of corn and oats *b*	11.25	1.88	10.38		72.16	4.33	2.1	11.6		81.2	5.1	do	2731
2732	Do. *b*	12.34	2.73	9.44		71.51	3.98	3.1	10.7		81.7	4.5	do	2732
2733	Do. *b*	11.35	2.23	9.94		71.48	5.00	2.5	11.2		80.7	5.6	do	2733
2734	Do. *b*	12.41	2.02	8.38		73.05	4.14	2.3	9.6		83.4	4.7	do	2734
2735	Do. *b*	10.72	1.90	9.38		73.65	4.35	2.1	10.5		82.5	4.9	do	2735
2736	Do. *b*	13.07	2.31	9.94		70.37	4.31	2.6	11.5		81.0	4.9	do	2736
2737	Unequal parts of corn and oats: only enough corn to cause the mixture to grind *b*.	11.11	3.61	10.44		70.30	4.45	4.0	11.9		79.1	5.1	do	2737
2738	Two parts of corn, 1 part of oats *b*	13.42	1.67	8.75		72.69	3.47	2.0	10.1		83.9	4.0	do	2738
	Equal parts of corn and oats, Nos. 2731–2736. Maximum	13.07	2.73	10.38		73.65	5.00	3.1	11.6		83.4	5.6		
	Equal parts of corn and oats, Nos. 2731–2736. Minimum	10.72	1.88	8.38		70.37	3.98	2.1	9.6		80.7	4.5		
	Equal parts of corn and oats, Nos. 2731–2736. Average	**11.86**	**2.18**	**9.57**		**72.04**	**4.35**	**2.4**	**10.9**		**81.7**	**5.0**		
2739	Corn, corn cob, and oats	11.04	2.00	8.43	5.07	68.67	4.79	2.2	9.5	5.7	77.2	5.4	Vt. Ex Sta. Rep., 1887, p. 132	2739
2740	Corn cob and oats *b*	14.04	1.53	7.94		72.80	3.69	2.3	9.3		84.1	4.3	N. J. Ex. Sta. Rep., 1885, p. 170	2740
2741	Corn, rye, and oats *b*	10.41	1.95	10.56		73.73	3.35	2.2	11.8		82.2	3.8	do	2741
2742	Do *b*	11.78	2.01	8.82		74.34	3.05	2.3	10.0		84.2	3.5	do	2742
2743	Corn and bran feed, 800 pounds corn, 500 pounds bran *b*.	11.48	2.71	10.56		71.22	4.03	3.0	11.9		80.6	4.5	do	2743
2744	Corn, oats, and wheat bran, "provender," 450 pounds corn, 125 pounds oats, and 100 pounds bran.	9.40	3.10	13.00	10.44	58.84	5.22	3.4	4.3	11.5	65.0	5.8	Mass. State Ex. Sta. Rep., 1888, p. 91.	2744
2745	Ground oat feed, contained admixtures richer in albuminoids and fat than oats.	8.92	3.21	7.00	8.00	55.27	7.60	3.5	18.7	8.8	60.7	8.3	do	2745
	BY-PRODUCTS AND WASTE MATERIALS.													
	BY-PRODUCTS FROM CORN (MAIZE).													
	Corn (maize) cob, flint varieties:													
2746	Norfolk White, raised in North Carolina	7.18	1.33	1.81	29.80	59.57	0.31	1.4	1.9	32.1	64.3	0.3	Conn. State Ex. Sta. Rep., 1878, p. 72.	2746
2747	Vermont White Cap, raised in Connecticut	8.40	0.96	2.63	30.47	57.21	0.33	1.1	2.9	33.2	62.4	0.4	do	2747
2748	Rowley, raised in Connecticut	8.05	0.98	1.81	32.39	56.54	0.23	1.1	2.0	35.2	61.5	0.2	do	2748
2749	Wheeler Prolific, raised in Massachusetts	10.00	1.27	3.73	29.87	54.52	0.61	1.4	4.1	33.2	60.6	0.7	Mass. Agr., 1879–'80, p. 250	2749
2750	Rhode Island White Cap	7.28	1.39	2.00	33.24	55.49	0.60	1.5	2.2	35.8	59.8	0.7	Conn. State Ex. Sta. Rep., 1887, p. 119.	2750
	Corn (maize) cob, dent varieties:													
2751	Ohio Dent, raised in Connecticut	8.21	0.97	2.56	30.99	56.99	0.28	1.1	2.8	33.7	62.1	0.3	Conn. State Ex. Sta. Rep., 1878, p. 72.	2751
2752	Southern White, raised in Massachusetts	10.00	0.68	3.14	30.05	55.79	0.34	0.8	3.4	33.4	62.0	0.4	Mass. Agr., 1879–'80, p. 250	2752
2753	Yellow Western, raised in Illinois	10.60	0.85	3.26	28.23	57.25	0.41	1.0	3.7	31.3	63.5	0.5	do	2753
2754	Kansas Dent	9.25	1.16	1.91	31.22	55.86	0.60	1.4	2.1	34.4	61.4	0.7	Kans. Agr. Col. Rep., 1884, p. 5	2754
2755	Pride of the North *c*	24.76	1.32	2.26	25.41	45.86	0.39	1.7	3.0	33.8	61.0	0.5	Mass. State Ex. Sta. Rep., 1888, p. 84.	2655
	Corn (maize) cob, sweet varieties:													
2756	Immature, cut August 9	10.10	6.70	8.56	21.40	51.14	2.10	7.5	9.5	23.8	56.9	2.3	Conn. State Ex. Sta. Rep., 1878, p. 72.	2756
2757	Immature, cut August 25	6.02	2.60	3.00	29.63	54.91	0.84	2.9	3.3	32.6	60.3	0.9	do	2757
2758	Cut September 25	8.82	1.47	2.69	30.57	55.53	0.92	1.6	3.0	33.5	60.9	1.0	do	2758
2759	Corn (maize) cob, soft variety, Tuscarora	8.37	1.57	2.56	30.01	57.15	0.34	1.7	2.8	32.7	62.4	0.4	do	2759

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM CORN (MAIZE)—continued.													
	Corn (maize) cob, unclassified:	%	%	%	%	%	%	%	%	%	%	%		
2760	Eight-rowed yellow	11.45	1.36	1.23	38.26	47.62	0.08	1.5	1.4	43.2	53.8	0.1	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 29.	2760
2761	Canada Yellow	7.52	2.14	2.65	29.76	57.72	0.51	2.3	2.5	32.1	62.5	0.6	Conn. State Ex. Sta. Rep., 1878, p. 72.	2761
2762	"Cob Meal," raised in Maryland	14.42	1.12	2.33	36.10	45.31	0.72	1.3	2.7	42.2	53.0	0.8	U. S. Dept. Agr. Rep., 1878, p. 136	2762
2763	Cob meal *a*	9.20	2.60	2.44	18.21	66.68	0.87	2.9	2.7	20.0	73.4	1.0	U. S. Dept. Agr. Rep., 1881–'82, p. 553	2763
2764	Do	21.55	1.55	1.22	31.60	43.84	0.24	2.0	1.5	40.3	55.9	0.3	N. Y. State Ex. Sta. Rep., 1886, p. 366	2764
2765	Brazilian flour corn	7.87	2.73	2.81	26.14	58.87	1.58	3.0	3.1	28 3	63.9	1.7	Vt. Ex. Sta. Rep., 1887, p. 132	2765
	All analyses, excluding Nos. 2756 and 2757. Maximum	24.76	2.73	3.73	38.26	66.68	0.92	3.0	4.1	43.2	73.4	1.0		
	Minimum	7.18	0.68	1.22	18.21	43.84	0.08	0.8	1.4	20.0	53.0	0.1		
	Average	**10.68**	**1.41**	**2.37**	**30.13**	**54.89**	**0.52**	**1.6**	**2.7**	**33.7**	**61.4**	**0.6**		
	Corn (maize) cob, field-cured, flint varieties, from mature ears:													
	Rhode Island White Cap—*													
2766	One stalk in 4 feet	48.61	0.75	1.10	17.89	31.43	0.22	1.5	2.2	34.8	61.1	0.4	Conn. State Ex. Sta. Rep., 1889, p. 25	2766
2767	One stalk in 2 feet	88.32	0.12	0.26	4.17	7.09	0.04	1.0	2.2	35.7	60.7	0.4	do	2767
2768	One stalk to a foot	49 09	0.56	1.28	18.61	30.28	0.18	1.1	2.5	36.6	39.5	0.3	do	2768
2769	Two stalks to a foot	92.31	0.09	0.16	2.77	4.58	0.03	1.2	2.2	36.3	59.9	0.4	do	2769
2770	Four stalks to a foot	85 38	0.19	0.36	5.25	8.75	0.07	1.3	2.5	35.9	59.8	0.5	do	2770
2771	Eight stalks to a foot (extra phosphate)	60.38	0.53	0.81	14.70	23.42	0.16	1.4	2.0	37.1	59.1	0.4	do	2771
	Corn (maize) cob, field-cured, flint varieties, from small and immature ears:													
	Rhode Island White Cap—*													
2772	One stalk in 4 feet	38.00	1.37	2.92	20.87	36.44	0.40	2.2	4.7	33.6	58.8	0.7	Conn. State Ex. Sta. Rep., 1889, p. 26	2772
2773	One stalk in 2 feet	43.96	0.97	2.15	19.62	32.96	0.35	1.7	3.9	34.9	58.9	0.6	do	2773
2774	One stalk to a foot	55.25	0.92	2.19	15.62	25.71	0.31	2.0	4.9	34.9	57.5	0.7	do	2774
2775	Two stalks to a foot	76.85	0.43	0.78	8.12	13.63	0.19	1.9	3.4	35.0	58.9	0.8	do	2775
2776	Four stalks to a foot	40 35	1.10	2.28	20.75	35.17	0.35	1.8	3.8	34.8	59.0	0.6	do	2776
2777	Eight stalks to a foot	37.72	1.09	1.32	22.10	37.43	0.34	1.7	2.1	35.5	60.1	0.6	do	2777
2778	Eight stalks to a foot (extra phosphate)	60.38	0.53	0.81	14.70	23.42	0.16	1.3	2.1	37.1	59.1	0.4	do	2778
	Corn (maize) cob, field-cured, dent varieties, from mature ears:													
2779	1.13 per cent of the stover *a*†	18.02	2.19	3.36	28.78	44.86	0.90	2.7	4.3	35.5	55.4	1.1	Pa. Ex. Sta. Rep., 1887, p. 154	2779

	White-Edged Dent, crop of 1888—*													
2780	One stalk in 4 feet	65.73	0.45	1.06	10.88	21.69	0.20	1.3	3.1	31.7	63.3	0.6	Conn. State Ex. Sta. Rep., 1889, p. 25	2780
2781	One stalk in 2 feet	61.59	0.42	0.80	13.01	24.00	0.18	1.1	2.1	33.9	62.4	0.5	do	2781
2782	One stalk to a foot	61.94	0.41	0.82	12.40	24.20	0.23	1.1	2.2	32.6	63.5	0.6	do	2782
2783	Two stalks to a foot	84.66	0.14	0.28	5.29	9.58	0.05	0.9	1.8	34.5	62.5	0.3	do	2783
2784	Two stalks to a foot (extra phosphate)	80.19	0.24	0.47	6.48	12.55	0.07	1.2	2.4	32.7	63.4	0.3	do	2784
2785	Four stalks to a foot	59.89	0.51	0.88	13.80	24.73	0.19	1.2	2.2	34.4	61.7	0.5	do	2785
2786	Four stalks to a foot (extra phosphate)	51.45	0.60	1.14	15.94	30.71	0.16	1.2	2.3	32.9	63.3	0.3	do	2786
2787	Eight stalks to a foot	66.25	0.39	0.73	11.68	20.75	0.20	1.2	2.2	34.6	61.4	0.6	do	2787
	White-Edged Dent, crop of 1889—*													
2788	One stalk in 4 feet	46.56	0.78	1.13	17.54	33.65	0.34	1.5	2.1	32.8	63.0	6.0	Conn. State Ex. Sta. Rep., 1889, p. 222	2788
2789	One stalk in 2 feet	37.48	0.68	1.12	21.88	38.53	0.31	1.1	1.8	35.0	61.6	0.5	do	2789
2790	One stalk to a foot	43.51	0.93	1.08	20.30	33.71	0.38	1.7	1.9	36.1	59.7	0.6	do	2790
2791	Two stalks to a foot	45.00	0.91	1.33	18.57	33.95	0.24	1.7	2.4	33.7	61.7	0.5	do	2791
2792	Four stalks to a foot	48.16	1.08	1.52	17.06	31.85	0.33	2.1	3.1	32.8	61.4	0.6	do	2792
2793	Eight stalks to a foot	44.98	1.06	1.61	18.83	33.17	0.35	2.0	2.9	34.3	60.2	0.6	do	2793
	Corn (maize) cob, field-cured, dent varieties, from small and immature ears:													
	White-Edged Dent, crop of 1888—*													
2794	One stalk in 4 feet	71.28	0.64	1.49	8.22	18.14	0.33	2.2	5.2	28.0	63.2	0.8	Conn. State Ex. Sta. Rep., 1889, p. 26	2794
2795	One stalk in 2 feet	53.16	0.78	2.47	14.57	28.72	0.30	1.7	5.3	31.1	61.3	0.6	do	2795
2796	One stalk to a foot	52.86	0.67	1.78	14.71	29.76	0.22	1.4	3.7	31.2	63.3	0.4	do	2796
2797	Two stalks to a foot	57.92	0.69	1.42	13.65	25.94	0.38	1.6	3.3	32.5	61.8	0.8	do	2797
2798	Two stalks to a foot (extra phosphate)	64.90	0.62	1.38	11.34	21.51	0.26	1.8	3.9	32.3	61.4	0.6	do	2798
2799	Four stalks to a foot	61.76	0.66	0.89	12.95	23.42	0.32	1.7	2.3	33.9	61.4	0.7	do	2799
2800	Four stalks to a foot (extra phosphate)	62.38	0.60	1.46	12.20	23.16	0.20	1.5	3.9	32.4	61.7	0.5	do	2800
2801	Eight stalks to a foot	58.24	0.66	1.39	14.17	25.27	0.27	1.5	3.3	34.0	60.6	0.6	do	2801
2802	Hominy chops or Baltimore meal	13.53	2.44	9.50	3.19	62.02	9.32	2.8	10.9	3.7	71.8	10.8	Conn. State Ex. Sta. Rep., 1879, p. 93	2802
2803	Do	11.56	2.67	9.82	4.79	62.58	8.58	3.0	11.1	5.4	70.8	9.7	do	2803
2804	Do	12.56	2.64	9.63	4.02	60.95	10.20	3.1	10.9	4.6	69.8	11.0	N. J. Ex. Sta. Rep., 1880, p. 47	2804
2805	Do	11.91	2.09	9.38	3.65	64.34	8.63	2.4	10.7	4.2	72.8	9.9	N. J. Ex. Sta. Rep., 1882, p. 71	2805
2806	Do	8.65	.....	8.69	.....	.....	7.16	.....	9.5	.....	.....	7.9	Conn. State Ex. Sta. Rep., 1883, p. 84	2806
2807	Do	11.14	2.32	9.50	2.54	67.96	6.54	2.6	10.7	2.9	76.5	7.3	do	2807
2808	Do	13.46	2.54	9.75	2.79	64.27	7.19	2.9	11.3	3.2	74.3	8.3	do	2808
2809	Do	12.91	.....	9.00	.....	.....	7.17	.....	10.3	.....	.....	8.2	do	2809
2810	Do	10.64	3.39	8.69	.....	.....	5.95	3.8	9.7	.....	.....	6.7	do	2810
2811	Do	11.46	2.30	7.88	3.30	67.68	7.38	2.6	8.9	3.7	76.6	8.2	do	2811
2812	Do.c	8.93	1.89	10.20	3.43	71.10	4.45	2.1	11.2	3.8	78.0	4.9	Mass. State Ex. Sta. Rep., 1883, p. 69	2812
2813	Hominy chops or Baltimore meal, Western	7.39	2.69	10.13	72.20		7.59	2.8	10.9	78.1		8.2	N. J. Ex. Sta. Rep., 1885, p. 166	2813
2814	Hominy chops or Baltimore meal	8.11	2.97	10.81	4.30	62.49	11.23	3.2	11.8	4.8	68.0	12.2	Mass. State Ex. Sta. Rep., 1885, p. 100	2814
2815	Do	9.22	3.12	11.20	4.02	62.88	9.56	3.4	12.3	4.4	69.4	10.5	Conn. State Ex. Sta. Rep., 1885, p. 41	2815
2816	Do	10.70	2.52	10.61	3.30	63.15	9.72	2.8	11.9	3.7	70.7	10.9	Mass. State Ex. Sta. Rep., 1886, p. 40	2816
2817	Do	10.00	2.20	8.82	6.67	65.81	6.50	2.4	9.8	7.4	73.2	7.2	Ohio Ex. Sta. Rep., 1887, p. 259	2817
	All complete analyses: Maximum	13.53	3.12	11.20	6.67	71.10	11.23	3.4	12.3	7.4	78.0	12.2		
	All complete analyses: Minimum	8.11	1.89	7.88	2.54	60.95	4.45	2.1	8.9	2.9	69.4	4.9		
	All complete analyses: Average	**11.05**	**2.48**	**9.75**	**3.84**	**64.60**	**8.28**	**2.8**	**11.10**	**4.3**	**72.6**	**9.3**		

* Rows 4 feet apart; 1,000 pounds ammoniated superphosphate per acre.

† Adds 99.01 (fresh or air-dry material).

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM CORN (MAIZE)—continued.													
	Corn (maize) germ:	%	%	%	%	%	%	%	%	%	%	%		
2818	Corn feed, ground germ	9.35	1.92	9.85	5.76	61.91	11.21	2.1	10.8	6.3	68.6	12.2	N. Y. State Ex Sta. Rep., 1886, p. 366.	2818
2819	Corn hearts	9.72	7.37	9.85	4.62	62.61	5.83	8.2	11.0	5.1	69.3	6.4	Wis. Ex. Sta. Rep., 1888, p. 141	2819
2820	Corn "germs"	13.62	2.70	9.73	1.91	67.42	5.22	3.1	11.2	2.2	77.5	6.0	Mass. State Ex. Sta. Rep., 1889, p. 142.	2820
	Average	**10.69**	**3.99**	**9.81**	**4.10**	**63.99**	**7.42**	**4.5**	**11.0**	**4.6**	**71.7**	**8.2**		
	Corn (maize) bran:													
2821	Corn bran *b*	7.66	1.42	6.94	80.01		3.97	1.5	7.6	86.6		4.3	N. J. Ex. Sta. Rep., 1885, p. 176	2821
2822	Corn feed, ground hulls	6.12	1.50	7.04	13.26	64.55	7.53	1.6	7.5	14.1	68.8	8.0	N. Y. State Ex. Sta. Rep., 1886, p. 366.	2822
2823	Corn bran	9.75	16.45	7.12	11.30	50.38	5.00	18.2	7.9	12.5	55.9	5.5	Wis. Ex. Sta. Rep., 1888, p. 141	2823
2824	Corn "husks" or "chaff"	13.26	2.43	4.86	16.38	61.68	1.39	2.8	5.6	18.9	71.1	1.6	Mass. State Ex. Sta. Rep., 1889, p. 142.	2824
	BY-PRODUCTS FROM MAIZE IN GLUCOSE MANUFACTURE.													
2825	Gluten meal *c*	8.43	0.59	35.00	3.25	44.72	8.01	0.6	38.2	3.6	48.8	8.8	Mass. State Ex. Sta. Rep., 1883, p. 70	2825
2826	Do	10.23	0.58	30.12	1.08	53.45	4.54	0.6	33.6	1.2	59.5	5.1	Mass. State Ex. Sta. Rep., 1883, p. 71	2826
2827	Do	7.31	0.74	28.03	0.73	54.46	8.73	0.8	30.2	0.8	58.8	9.4	N. Y. State Ex. Sta. Rep., 1883, p. 151.	2827
2828	Do	11.68	0.67	24.95	0.68	58.53	3.49	0.8	28.2	0.8	66.3	3.9	Mass. State Ex. Sta. Rep., 1884, p. 56	2828
2829	Do	9.92	1.04	29.50	1.04	54.32	4.18	1.1	32.7	1.2	60.3	4.7	N. J. Ex. Sta. Rep., 1884, p. 107	2829
2830	Do	8.47	0.70	32.32	1.58	48.39	8.54	0.8	35.3	1.7	52.8	9.4	Mass. State Ex. Sta. Rep., 1885, p. 22	2830
2831	Do	8.25	0.86	30.16	2.44	53.13	5.16	0.9	32.9	2.7	57.9	5.6	N. Y. State Ex. Sta. Rep., 1885, p. 306.	2831
2832	Do	16.50	0.61	15.03	7.81	55.26	4.79	0.7	18.0	9.3	66.3	5.7	do	2832
2833	Do	12.29	0.66	15.84	8.25	57.96	5.00	0.7	18.1	9.4	66.1	5.7	do	2833
2834	Do	9.00	0.74	17.40	8.59	56.93	7.34	0.8	19.1	9.4	62.6	8.1	do	2834
2835	Do	8.86	1.01	29.12	0.86	53.91	6.24	1.1	31.9	0.9	59.3	6.8	Conn. State Ex. Sta. Rep., 1885, p. 42	2835
2836	Do	8.95	0.69	28.05	1.44	54.03	6.84	0.7	30.8	1.6	59.4	7.5	Mass. State Ex. Sta. Rep., 1886, p. 38	2836
2837	Do	12.29	0.66	29.47	0.97	50.62	5.99	0.8	33.7	1.1	57.6	6.8	Conn. State Ex. Sta. Rep., 1886, p. 113	2837
2838	Do *c*	8.83	0.67	28.65	0.72	53.41	7.72	0.7	31.4	0.8	58.6	8.5	Mass. State Ex. Sta. Rep., 1887, p. 34	2838
2839	Do	8.45	0.69	32.33	1.58	48.40	8.55	0.7	35.3	1.7	53.0	9.3	Mass State Ex. Sta Rep., 1887, p. 84	2839
2840	Do	10.04	0.70	31.18	4.00	45.68	8.40	0.8	34.7	4.4	50.8	9.3	Mass. State Ex. Sta. Rep., 1887, p 85	2840
2841	Do	8.23	1.27	27.38	1.46	55.98	5.68	1.4	29.8	1.6	61.0	6.2	Conn. State Ex. Sta Rep., 1887, p. 105	2841
2842	Do	10.19	0.63	29.62	1.65	50.15	7.76	0.7	33.0	1.8	32.9	8.6	Vt. Ex. Sta. Rep., 1887, p. 135	2842
2843	Do	9.45	0.56	27.81	1.57	52.92	7.69	0.7	30.6	1.8	58.4	8.5	do	2843
2844	Do	7.97	1.67	35.54	1.04	46.79	6.99	1.8	38.6	2.1	50.9	7.6	Vt. Ex Sta. Rep., 1887, p 137	2844
2845	Do	9.77	0.84	31.97	4.15	47.29	5.98	0.9	35.4	4.6	52.5	6.6	Mass. State Ex. Sta. Rep., 1888, p. 35	2845

2846	Do	10.59	0.47	33.12	0.80	50.11	4.91	0.5	37.0	0.9	56.1	5.5	Mass. State Ex. Sta. Rep., 1888, p. 50	2846
2847	Do	10.09	0.46	35.32	0.77	48.99	4.37	0.5	39.3	0.9	54.4	4.9	Mass. State Ex. Sta. Rep., 1888, p. 83	2847
2848	Do	9.50	0.98	32.75	4.29	48.93	3.55	1.1	36.2	4.7	54.1	3.9	Mass. State Ex. Sta. Rep., 1888, p. 89	2848
2849	Do	11.10	0.49	30.93	0.81	51.22	5.45	0.5	34.8	0.9	57.7	6.1	Mass. State Ex. Sta. Rep., 1888, p. 90	2849
2850	Do	6.40	1.02	21.25	5.03	57.23	9.07	1.1	22.7	5.4	61.1	9.7	Vt. Ex. Sta. Rep., 1888, p. 76	2850
2851	Do	9.15	0.83	32.31	0.73	47.37	9.61	0.9	35.6	0.8	52.1	10.6	do	2851
2852	Do	10.22	0.45	27.02	0.54	56.83	4.94	0.5	30.1	0.6	63.3	5.5	Mass. State Ex. Sta. Rep., 1889, p. 32	2852
2853	Do	9.49	0.09	27.06	0.27	57.01	6.06	0.1	29.9	0.3	63.0	6.7	Mass. State Ex. Sta. Rep., 1889, p. 132	2853
2854	Do	10.50	0.27	26.13	0.36	56.39	6.35	0.3	29.2	0.4	63.0	7.1	do	2854
2855	Do	11.29	0.62	27.41	0.62	56.41	3.63	0.7	30.9	0.7	63.6	4.1	do	2855
2856	Do	9.89	0.72	26.76	0.63	56.86	5.14	0.8	29.7	0.7	63.1	5.7	Mass. State Ex. Sta. Rep., 1889, p. 134	2856
2857	Do	7.85	1.65	37.87	1.47	35.13	16.03	1.8	41.1	1.6	38.1	17.4	do	2857
2858	Do	9.62	0.96	21.97	3.89	56.57	7.05	1.0	24.3	4.3	62.6	7.8	Mass. State Ex. Sta. Rep., 1889, p. 135	2858
2859	Do	9.80	1.08	28.23	1.53	53.05	6.31	1.2	31.3	1.7	58.8	7.0	do	2859
2860	Do. *c*	10.52	0.70	29.70	0.81	54.90	3.37	0.8	33.2	0.9	61.3	3.8	N. H. Ex. Sta. Bul. 8, 1888	2860
2861	Do. *b*	7.30	1.20	36.89	1.02	37.28	16.31	1.3	39.8	1.1	40.2	17.6	Mass. State Ex. Sta. Bul. 37, 1890	2861
	All analyses, excluding Nos. 2832–2834, 2857, and 2861. Maximum	12.29	1.67	35.54	5.03	58.53	9.61	1.4	39.3	5.4	66.3	10.6		
	Minimum	6.40	0.09	21.25	0.27	44.72	3.37	0.1	22.7	0.3	32.9	3.8		
	Average	**9.55**	**0.74**	**29.41**	**1.60**	**52.44**	**6.26**	**0.8**	**32.5**	**1.8**	**57.9**	**7.0**		
2862	Buffalo sugar meal, 1 bushel said to weigh 50 pounds.	62.91	0.15	3.27	2.00	27.60	4.07	0.5	8.8	5.4	74.4	10.9	Conn. State Ex. Sta. Rep., 1888, p. 153	2862
2863	Glucose waste, from glucose factories after separating starch.	76.00	0.51	3.72	0.75	17.39	1.63	2.1	15.5	3.1	72.5	6.8	U. S. Dept. Agr. Rep., 1880, p. 169	2863
2864	Sugar feed, kiln-dried	6.57	3.22	13.50	10.65	54.85	11.21	3.4	14.5	11.4	58.7	12.0	Conn. State Ex. Sta. Rep., 1881, p. 83	2864
2865	Do	10.40	0.78	13.13	8.44	61.38	5.87	0.9	14.7	9.4	68.5	6.5	do	2865
2866	Gluten No. 1, feed	11.66	0.56	17.81	3.08	59.56	7.33	0.7	20.1	3.5	67.4	8.3	Conn. State Ex. Sta. Rep., 1881, p. 152	2866
	BY-PRODUCTS FROM MAIZE IN STARCH MANUFACTURE.													
	Starch feed, wet:													
2867	Starch waste	72.19	0.12	3.56	3.36	18.78	1.99	0.4	12.9	12.0	67.5	7.2	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38.	2867
2868	Starch waste, from Glen Cove factory	62.27	0.27	5.67	1.58	28.90	1.31	0.7	15.0	4.2	76.6	3.5	Conn. State Ex. Sta. Rep., 1878, p. 76	2868
2869	Do	64.98	0.27	5.81	2.83	22.73	3.38	0.8	16.6	8.0	64.9	9.7	N. J. Ex. Sta. Rep., 1883, p. 74	2869
2870	Do	68.51	0.21	6.55	2.07	18.69	3.97	0.6	20.8	6.6	59.4	12.6	N. Y. State Ex. Sta. Rep., 1885, p. 306	2870
2871	Do	64.50	0.21	4.65	4.34	24.30	2.00	0.6	13.1	12.2	68.5	5.6	do	2871
2872	Do	63.79	0.23	7.70	3.29	20.72	4.27	0.7	21.3	9.1	57.1	11.8	do	2872
2873	Do	63.60	0.24	7.66	3.68	20.78	4.04	0.6	21.1	10.1	51.1	11.1	do	2873
2874	Do	65.50	0.18	4.31	4.29	22.46	3.26	0.5	12.5	12.4	65.1	9.5	do	2874
2875	Do	57.04	0.37	9.63	3.24	25.34	4.38	0.9	22.4	7.5	59.0	10.2	Mass. State Ex. Sta. Rep., 1886, p. 42	2875
2876	Do	69.95	0.60	4.29	4.41	18.67	2.08	2.0	14.3	14.7	62.1	6.9	Ohio Ex. Sta. Rep., 1887, p. 259	2876
2877	Do	66.53	0.25	6.01	2.00	22.47	2.74	0.8	18.2	6.0	66.9	8.1	Conn. State Ex. Sta. Rep., 1888, p. 153	2877
2878	Do	66.19	0.48	7.58	1.87	19.63	4.25	1.4	22.4	5.5	58.1	12.6	Vt. Ex. Sta. Rep., 1888, p. 76	2878
	Maximum	72.19	0.60	9.63	4.41	28.90	4.38	2.0	22.4	14.7	68.5	12.6		
	Minimum	62.27	0.12	3.56	1.58	18.67	1.31	0.4	12.5	4.2	51.1	3.5		
	Average	**65.42**	**0.29**	**6.12**	**3.08**	**21.95**	**3.14**	**0.8**	**17.6**	**8.9**	**63.6**	**9.1**		

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM MAIZE IN STARCH MANUFACTURE—continued.													
	Starch feed, dried:	%	%	%	%	%	%	%	%	%	%	%		
2879	Residue from starch works	8.88	1.02	15.13	8.30	58.04	8.63	1.1	16.6	9.1	63.7	9.5	N. J. Ex. Sta. Rep., 1880, p. 46	2879
2880	Starch refuse, dry feed	6.00	0.72	16.04	13.02	58.14	6.08	0.8	17.0	13.9	61.8	6.5	N. Y. State Ex. Sta. Rep., 1885, p. 306	2880
2881	Corn refuse	9.22	9.35	10.13	1.23	65.27	3.80	10.3	11.2	1.3	73.0	4.2	Wis. Ex. Sta. Rep., 1888, p. 141	2881
	BY-PRODUCTS FROM OATS.													
2882	Oat bran	7.70	3.70	7.10	19.30	57.90	2.30	4.1	7.8	21.3	64.3	2.5	Ontario Agr. Col. Bul. 14, 1887, p. 6	2882
2883	Oat feed, from oatmeal manufacture *c*	8.19	4.24	12.64	12.48	56.31	6.14	4.6	13.8	13.6	61.2	6.8	Conn. State Ex. Sta. Rep., 1886, p. 111	2883
2884	Middlings, from oatmeal manufacture	9.19	3.24	20.00	3.80	56.19	7.58	3.5	22.0	4.2	61.9	8.4	Conn. State Ex. Sta. Rep., 1888, p. 151	2884
2885	Oat feed *b*	6.36	3.18	15.27	3.74	63.68	7.77	3.4	16.3	4.0	68.0	8.3	Mass. State Ex. Sta. Bul. 37, 1890	2885
2886	Do. *b*	6.85	4.19	16.21	4.38	61.67	6.70	4.5	17.4	4.7	66.2	7.2	do	2886
	Average, excluding 2882	**7.65**	**3.71**	**16.03**	**6.10**	**59.46**	**7.05**	**4.0**	**17.3**	**6.6**	**64.4**	**7.7**		
	BY-PRODUCTS FROM BARLEY													
2887	Barley bran	12.00	4.10	14.80	19.40	45.60	4.10	4.7	16.8	22.0	51.8	4.7	Ontario Agr. Col. Bul. 14, 1887, p. 6	2887
2888	Barley feed, from pearled barley	13.20	4.25	11.94	7.98	59.38	3.25	4.8	13.6	9.2	68.6	3.8	Conn. State Ex. Sta. Rep., 1886, p. 112	2888
2889	Barley screenings	12.42	3.60	12.12	7.62	61.60	2.64	4.1	13.8	8.6	70.4	3.1	Conn. State Ex. Sta. Rep., 1888, p. 151	2889
2890	Do	12.02	3.51	12.50	7.00	62.03	2.94	4.0	14.1	8.0	70.5	3.4	do	2890
	Average	**12.22**	**3.55**	**12.31**	**7.31**	**61.82**	**2.79**	**4.0**	**14.0**	**8.3**	**70.4**	**3.3**		
2891	Malt sprouts	11.55	6.68	25.91	9.30	45.47	1.09	7.5	29.3	10.5	51.6	1.1	Conn. State Ex. Sta. Rep., 1877, p. 50	2891
2892	Do	7.31	6.59	21.94	10.88	50.30	2.98	7.1	23.7	11.9	54.1	3.2	N. Y. Cornell Ex. Sta. Rep., 1883, p. 41	2892
2893	Do	11.97	3.75	21.00	11.99	50.00	1.29	4.3	23.9	13.6	56.7	1.5	Wis. Ex. Sta. Bul. 3., p. 6	2893
2894	Do. *b*	10.47	12.48	14.81	60.84		1.40	13.9	16.4	68.1		1.6	N. J. Ex. Sta. Rep., 1885, p. 166	2894
2895	Do	10.10	5.84	23.87	10.76	48.05	1.38	6.5	26.5	11.9	53.5	1.6	Conn. State Ex. Sta. Rep., 1888, p. 32	2895
	Average all complete analyses	**10.23**	**5.72**	**23.18**	**10.73**	**48.46**	**1.68**	**6.3**	**25.8**	**11.8**	**54.2**	**1.9**		

	Brewers' grains, wet:														
2896	No particulars given	78.50	1.07	4.69	3.11	12.63		5.0	21.8	14.5	58.7		Conn. Bd. Agr. Rep., 1872, p. 423	2896
2897	One bushel weighs 70 pounds	75.24	0.29	5.94	3.87	13.19	1.47	1.2	24.1	15.6	53.2	5.9	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38.	2897
2898	No particulars given	76.40	0.87	5.56	3.43	11.86	1.88	3.7	23.6	14.5	50.2	8.0	N. J. Ex. Sta. Rep., 1880, p. 46	2898
2899	Do	76.23	0.92	5.56	3.55	11.68	2.06	3.9	23.6	14.9	48.8	8.8	do	2899
2900	Do	78.21	1.36	4.79	3.20	11.65	0.79	6.3	22.0	14.7	53.4	3.6	Conn. State Ex. Sta. Rep., 1881, p. 85	2900
2901	Do	68.64	1.51	7.75	4.99	14.17	2.94	4.8	24.7	15.9	45.3	9.3	N. J. Ex. Sta. Rep., 1881, p. 53	2901
2902	Do	75.50	0.97	6.19	5.58	10.11	1.65	4.0	25.1	22.5	41.5	6.9	do	2902
2903	Do	71.54	1.16	6.30	3.10	15.73	2.18	4.1	22.1	10.9	55.2	7.7	N. J. Ex. Sta. Rep., 1883, p. 74	2903
2904	Do	75.27	0.86	5.65	3.16	13.37	1.70	3.5	22.9	12.8	53.9	6.9	N. J. Ex. Sta. Rep., 1884, p. 107	2904
2905	Do. *b*	68.60	1.51	6.88	4.23	15.94	2.84	5.1	21.9	13.5	50.5	9.0	do	2905
2906	Do	74.98	0.87	5.18	3.53	14.13	1.31	3.5	20.7	14.1	56.5	5.2	N. Y. State Ex. Sta. Rep., 1884, p. 332	2906
2907	Do	79.41	0.76	4.27	3.05	11.67	0.84	3.7	20.7	14.8	56.7	4.1	do	2907
2908	Do	76.54	0.98	4.44	4.09	12.60	1.35	4.2	18.9	17.4	53.7	5.8	do	2908
2909	Do	76.92	1.13	5.33	4.17	11.06	1.39	4.9	23.1	18.0	48.0	6.0	do	2909
2910	Do	76.21	0.96	4.83	4.38	12.21	1.41	4.0	20.3	18.4	51.4	5.9	do	2910
2911	Do	75.57	0.95	4.89	3.74	13.41	1.44	3.9	20.0	15.3	54.9	6.9	do	2911
2912	Do	78.34	0.95	5.74	4.17	9.57	1.43	4.4	26.6	19.2	43.2	6.6	Vt. Ex. Sta. Rep., 1888, p. 76	2912
	All complete analyses: Maximum	79.41	1.51	6.88	5.58	15.94	2.94	6.3	26.6	22.5	56.7	9.3		
	All complete analyses: Minimum	68.60	0.29	4.27	3.05	9.57	0.79	1.2	18.9	10.9	41.5	3.6		
	All complete analyses: Average	**75.66**	**0.96**	**5.44**	**3.82**	**12.54**	**1.58**	**3.9**	**22.4**	**15.7**	**51.5**	**6.5**		
2913	Brewers' grains, dried	6.23	3.31	19.25	10.24	56.80	4.17	3.5	20.5	10.9	60.7	4.4	Conn. State Ex. Sta. Rep., 1883, p. 86	2913
2914	Do	11.91	3.63	20.25	11.60	46.10	6.51	4.1	23.0	13.2	52.3	7.4	do	2914
2915	Do	8.43	3.82	20.19	11.20	52.35	6.01	4.3	21.6	12.0	55.7	6.4	N. J. Ex. Sta. Rep., 1883, p. 74	2915
2916	Do	9.52	16.25	13.76	15.21	39.40	5.86	18.0	15.2	16.8	53.5	6.5	Wis. Ex. Sta. Rep., 1888, p. 141	2916
	Average, excluding No. 2916	**8.19**	**3.59**	**19.90**	**11.01**	**51.75**	**5.56**	**3.9**	**21.7**	**12.0**	**56.3**	**6.1**		
2917	Brewers' grains, kiln-dried	2.57	3.97	20.38	11.79	54.89	6.40	4.0	20.9	12.1	56.4	6.6	Conn. State Ex. Sta. Rep., 1880, p. 88	2917
2918	Spent brewers' grains *c*	6.98	5.72	19.06	14.79	51.64	1.81	6.1	20.6	15.9	55.5	2.0	Mass. State Ex. Sta. Rep., 1888, p. 92	2918
	BY-PRODUCTS FROM RYE.													
2919	Rye bran	12.88	2.89	12.58	2.54	66.96	2.15	3.3	14.4	2.9	76.9	2.5	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 27.	2919
2920	Do	10.30	3.54	16.81	4.07	62.68	2.60	4.0	18.7	4.5	69.9	2.9	Conn. State Ex. Sta. Rep., 1878, p. 75	2920
2921	Do	13.70	4.46	16.38	3.92	59.75	1.79	5.2	19.0	4.5	69.2	2.1	Mass. State Ex. Sta. Rep., 1883, p. 82	2921
2922	Do	12.31	4.35	16.06	4.09	60.15	3.04	5.0	18.3	4.7	68.8	3.4	Conn. State Ex. Sta. Rep., 1885, p. 42	2922
2923	Do. *b*	13.26	2.34	12.81	69.54		2.02	2.7	14.8	80.4		2.3	N. J. Ex. Sta. Rep., 1885, p. 170	2923
2924	Rye bran, old process *b*	10.62	2.61	12.94	72.13		1.70	2.9	14.5	80.7		1.9	do	2924
2925	Rye bran *b*	13.74	3.66	13.63	65.09		3.85	4.3	15.7	75.5		4.5	do	2925
2926	Do. *b*	12.39	3.11	13.31	68.23		2.96	3.5	15.1	78.0		3.4	do	2926
2927	Do. *b*	11.68	3.06	14.38	68.28		2.60	3.4	16.3	77.4		2.9	do	2927
2928	Do	8.18	3.15	15.16	3.18	67.55	2.78	3.4	16.5	3.5	73.6	3.0	Mass. State Ex. Sta. Rep., 1886, p. 40	2928

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM RYE—continued.	%	%	%	%	%	%	%	%	%	%	%		
2929	Rye bran *c*	12.54	3.52	11.50	3.24	64.30	4.90	4.0	13.2	3.7	73.5	5.6	Mass. State Ex. Sta. Rep., 1887, p. 33	2929
2930	Do	11.60	3.29	14.70	3.30	64.80	2.40	3.6	16.5	3.7	73.5	2.7	Guelph Agr. Col. Bul. 14, 1887, p. 6	2930
	All complete analyses: Maximum	13.70	4.46	16.81	4.09	67.55	4.90	5.2	19.0	4.7	76.9	5.6		
	All complete analyses: Minimum	8.18	2.89	11.59	2.54	59.75	1.79	3.3	13.2	2.9	68.6	2.1		
	All complete analyses: Average	**11.64**	**3.59**	**14.74**	**3.48**	**63.74**	**2.81**	**4.1**	**16.6**	**4.0**	**72.1**	**3.2**		
2931	Rye feed, middlings *b*	.....	1.37	10.56	.....	.....	.....	.....	.....	.....	.....	.....	N. J. Ex. Sta. Rep., 1885, p. 170	2931
2932	Rye feed	12.77	2.62	13.56	2.75	65.70	2.60	3.0	15.5	3.2	75.3	3.0	Conn. State Ex. Sta. Rep., 1888, p. 151	2932
	BY-PRODUCTS FROM WHEAT.													
2933	Wheat bran, from spring wheat	11.00	5.66	14.31	9.54	54.83	4.66	6.4	16.0	10.8	61.6	5.2	N. J. Ex. Sta. Rep., 1881, p. 53	2933
2934	Do	13.57	5.72	14.93	8.94	52.47	4.37	6.7	17.3	10.3	60.7	5.0	Conn. State Ex. Sta. Rep., 1885, p. 36	2934
2935	Do	12.27	5.57	15.44	7.89	54.64	4.19	6.3	17.6	9.0	62.3	4.8	do	2935
2936	Do	12.31	5.98	15.12	10.12	52.08	4.39	6.8	17.2	11.5	59.5	5.0	do	2936
2937	Do	7.38	5.90	16.69	7.44	58.12	4.47	6.4	18.0	8.0	62.8	4.8	do	2937
2938	Do	11.30	5.99	15.30	8.80	54.40	4.30	6.7	17.2	10.0	61.3	4.8	Ontario Agr. Col. Bul. 14, 1887	2938
2939	Do	10.77	6.03	17.12	9.35	51.68	5.08	6.7	19.2	10.5	58.0	5.6	Conn. State Ex. Sta. Rep., 1888, p. 149	2939
2940	Do	12.22	5.07	16.06	6.67	56.36	3.62	5.8	18.3	7.6	64.2	4.1	do	2940
2941	Do	11.64	3.99	18.06	5.39	56.13	4.79	4.5	20.5	6.1	63.5	5.4	do	2941
2942	Do	12.20	4.32	17.75	5.48	55.40	4.85	4.9	20.2	6.3	63.0	5.6	do	2942
	Maximum	13.57	6.03	18.06	10.12	58.12	5.03	6.8	20.5	10.8	64.2	5.6		
	Minimum	7.38	3.99	14.31	5.39	51.68	3.62	4.5	16.0	6.1	58.0	4.1		
	Average	**11.47**	**5.41**	**16.08**	**7.96**	**54.61**	**4.47**	**6.1**	**18.2**	**9.0**	**61.6**	**5.1**		
2943	Wheat bran, from winter wheat	10.64	6.08	16.31	8.67	54.42	3.88	6.8	18.2	9.7	60.9	4.4	N. J. Ex. Sta. Rep., 1881, p. 53	2943
2944	Do	10.62	6.15	15.63	7.55	56.22	3.83	6.8	17.5	8.5	62.9	4.3	do	2944
2945	Do. *b*	13.35	4.98	15.94	7.33	54.14	4.26	5.8	18.5	8.5	62.3	4.9	N. J. Ex. Sta. Rep., 1882, p. 71	2945
2946	Do	13.60	5.79	13.87	7.24	55.99	3.51	6.7	16.1	8.4	64.7	4.1	N. J. Ex. Sta. Rep., 1883, p. 74	2946
2947	Do	12.08	6.42	17.75	8.75	50.54	4.46	7.3	20.2	9.9	57.5	5.1	Conn. State Ex. Sta. Rep., 1885, p. 36	2947

2948	Do	13.35	6.01	18.50	8.93	51.15	4.06	6.9	19.0	10.3	59.1	4.7	do	2948
2949	Do	12.30	5.90	16.00	8.10	53.70	4.00	6.7	18.2	9.2	61.3	4.6	Ontario Agr. Col. Bul. 14, 1887	2949
	Maximum	13.60	6.42	17.75	8.93	56.22	4.46	7.3	20.2	10.3	64.7	5.1		
	Minimum	10.62	4.98	13.87	7.24	56.54	3.51	5.8	16.1	8.4	57.5	4.1		
	Average	**12.28**	**5.90**	**16.00**	**8.08**	**53.74**	**4.00**	**6.7**	**18.2**	**9.2**	**61.3**	**4.6**		
	Wheat bran, unclassified:													
2950	Coarse wheat feed from white wheat	10.87	5.75	13.63	7.56	58.92	3.27	6.5	15.3	8.5	68.1	3.6	Conn. State Ex. Sta. Rep., 1877, p. 59	2950
2951	Coarse wheat feed from red wheat	11.14	5.99	12.13	9.31	58.36	3.07	6.7	13.7	10.4	65.7	3.5	do	2951
2952	Western wheat bran	12.12	6.33	13.50	8.79	55.90	3.36	7.2	15.4	10.1	83.5	3.8	do	2952
2953	Fine feed (ground bran)	10.47	5.56	13.88	7.98	58.88	3.23	8.2	15.5	8.9	65.8	3.6	do	2953
2954	Not described	11.65	5.63	14.00	9.13	55.56	4.03	6.4	15.8	10.3	62.9	4.6	Mich. Bd. Agr. Rep., 1878, p. 410	2954
2955	Western bran	10.88	5.90	16.06	7.99	55.12	4.05	6.6	18.1	9.0	61.8	4.5	N. J. Ex. Sta. Rep., 1880, p. 47	2955
2956	Not described *a*	8.65	6.15	16.27	5.90	57.43	5.60	6.8	17.8	6.5	62.8	6.1	U. S. Dept. Agr. Rep., 1880, p. 169	2956
2957	Do	12.21	4.15	16.74	7.81	56.19	3.00	4.7	19.0	8.9	64.0	3.4	U. S. Census, 1880, vol. III, p. 37	2957
2958	Do	13.56	6.15	16.58	8.22	51.56	3.95	7.1	19.2	9.5	59.6	4.6	Conn. State Ex. Sta. Rep., 1881, p. 85	2958
2959	Do	13.94	5.52	14.89	7.31	55.95	2.39	6.4	17.3	8.5	65.1	2.7	do	2959
2960	Do	12.53	4.93	14.94	7.34	56.19	4.07	5.6	17.1	8.4	64.3	4.6	N. J. Ex. Sta. Rep., 1881, p. 53	2960
2961	Southern bran	12.58	6.34	18.81	8.49	53.42	2.35	7.3	19.1	9.7	61.2	2.7	do	2961
2962	Not described *a*	11.10	6.30	16.25	10.10	50.41	5.84	7.1	18.3	11.3	56.8	6.5	U. S. Dept. Agr. Rep., 1881–'82, p. 553	2962
2963	Do	11.60	6.30	14.00	8.40	56.80	2.90	7.1	15.8	9.6	64.3	3.3	Agr. of Me., 1882, p. 302	2963
2964	Do	13.70	5.83	16.88	8.05	53.03	2.51	6.7	19.6	9.3	61.5	2.9	Mass. State Ex. Sta. Rep., 1883, p. 82	2964
2965	Do	14.18	5.97	12.69	7.69	56.21	3.26	7.0	14.8	8.9	65.5	3.8	Conn. State Ex. Sta. Rep., 1883, p. 87	2965
2966	Do	12.08	6.96	13.77	12.07	51.77	3.35	7.9	16.7	13.7	58.9	3.8	Mass. State Ex. Sta. Rep., 1883, p. 83	2966
2967	Do	10.48	6.26	18.12	9.13	51.75	4.26	7.0	20.2	10.2	57.8	4.8	Mass. State Ex. Sta. Rep., 1884, p. 58	2967
2968	Contained corn cockle (*Lychnis githago*) and black bindweed (*Polygonum convolvulus*).	11.90	6.33	14.08	83.88		3.71	7.2	16.7	71.9		4.2	Conn. State Ex. Sta. Rep., 1884, p. 109	2968
2969	Not described	13.72	6.12	13.69	10.52	53.09	2.86	7.1	15.9	12.2	61.5	3.3	N. Y. State Ex. Sta. Rep., 1884, p. 332	2969
2970	Do	14.24	5.69	15.33	7.53	54.26	2.95	6.6	17.8	8.7	63.4	3.5	do	2970
2971	Do	14.13	5.26	14.64	7.87	55.25	2.85	6.2	16.9	9.2	64.3	3.4	do	2971
2972	Do	14.28	5.02	14.89	7.50	55.63	2.88	5.8	17.2	8.7	65.1	3.2	do	2972
2973	Do	12.05	5.82	15.69	10.10	52.18	4.16	6.6	17.9	11.5	59.2	4.8	Mass. State Ex. Sta. Rep., 1885, p. 22	2973
2974	Do	15.83	5.43	13.99	13.14	50.11	1.50	6.4	16.6	15.6	59.6	1.8	N. Y. Ex. Sta. Rep., 1885, p. 306	2974
2975	Do	12.62	5.58	14.91	15.50	45.53	5.86	6.4	17.1	17.7	52.1	6.7	do	2975
2976	Do	13.36	5.26	13.81	14.82	50.38	2.37	6.1	15.9	17.1	58.2	2.7	do	2976
2977	Western bran *b*	11.23	7.70	12.31	63.72		5.04	8.7	13.8	71.9		5.6	N. J. Ex. Sta. Rep., 1885, p. 166	2977
2978	Do. *b*	12.22	6.36	14.31	63.04		4.67	7.3	16.2	71.8		4.7	do	2978
2979	Do. *b*	12.32	5.84	16.00	62.44		3.40	6.6	18.2	71.3		3.9	do	2979
2980	Do. *b*	11.80	6.83	14.81	63.60		2.96	7.7	16.8	72.1		3.4	do	2980
2981	Do. *b*	12.90	7.03	14.69	61.93		3.45	8.0	16.8	71.2		4.0	do	2981
2982	Do. *b*	12.10	6.73	14.94	62.69		3.54	8.6	17.1	76.9		4.0	do	2982
2983	Old-process bran *b*	11.20	5.99	14.81	63.75		4.25	6.8	16.6	71.8		4.8	do	2983
2984	Do. *b*	11.63	6.50	14.19	64.74		2.94	7.3	16.0	73.4		3.3	do	2984
2985	Do. *b*	13.10	4.01	17.31	62.74		2.84	4.6	20.3	71.9		3.2	do	2985
2986	New-process bran (coarse) *b*	11.42	5.98	16.06	63.62		2.92	6.8	18.2	71.7		3.3	do	2986
2987	New-process bran (fine) *b*	12.39	4.77	17.94	60.45		4.45	5.5	20.5	68.9		5.1	do	2987
2988	New-process bran *b*	12.05	6.36	15.50	62.36		3.73	7.3	17.5	71.0		4.2	do	2988
2989	Not described *b*	13.72	6.13	15.56	61.07		3.52	7.1	18.0	70.8		4.1	do	2989

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM WHEAT—continued.													
	Wheat bran, unclassified—Continued.	%	%	%	%	%	%	%	%	%	%	%		
2990	Not described *b*	10.90	6.31	15.31	63.86		3.62	7.1	16.9	72.0		4.0	N. J. Ex. Sta. Rep., 1885, p. 166	2990
2991	Do. *b*	12.20	7.78	14.00	64.17		1.85	8.9	15.9	73.0		2.2	do	2991
2992	Do. *b*	11.95	5.65	15.19	64.76		2.45	6.5	17.2	73.5		2.8	do	2992
2993	Do. *b*	12.05	5.79	13.44	66.28		2.44	6.6	15.2	75.5		2.7	do	2993
2994	Old process, Southern *b*	12.50	5.66	14.95	63.83		2.98	6.5	17.2	72.9		3.4	do	2994
2995	Not described	11.41	6.35	15.50	8.88	53.87	3.99	7.2	17.4	10.0	60.8	4.6	Conn. State Ex. Sta. Rep., 1885, p. 36	2995
2996	Do	13.20	6.15	15.56	9.83	50.96	4.30	7.1	17.9	11.3	58.7	5.0	do	2996
2997	Fine feed	11.98	4.05	16.06	5.14	58.39	4.38	4.6	18.2	5.8	66.4	5.0	do	2997
2998	Do	12.17	4.50	16.20	5.63	57.17	4.33	5.1	18.4	6.4	65.2	4.9	do	2998
2999	Do	12.89	4.16	15.44	5.75	57.55	4.21	4.8	17.7	6.6	66.1	4.8	do	2999
3000	Do	12.82	2.50	15.81	2.35	63.15	3.37	2.9	18.1	2.7	72.4	3.9	do	3000
3001	Roller bran, from Pillsbury Mills, Minneapolis.	13.68	5.29	14.69	11.77	51.03	3.54	6.1	17.0	13.6	59.2	4.1	Wis. Ex. Sta. Rep., 1886, p 87	3001
3002	Do	13.37	5.14	14.63	12.75	50.51	3.60	5.9	16.9	14.7	58.3	4.2	Wis. Ex. Sta. Rep., 1886, p. 95	3002
3003	Do	14.00	5.43	14.75	10.80	51.56	3.46	6.3	17.2	12.6	59.9	4.0	do	3003
3004	Roller bran, from Washburn Mills, Minneapolis, bought in autumn.	14.13	6.05	15.19	10.31	50.96	3.36	7.1	17.7	12.0	59.3	3.9	Wis. Ex. Sta. Rep., 1886, p. 87	3004
3005	Roller bran, from Washburn Mills, Minneapolis.	14.61	6.64	14.88	10.24	49.71	3.92	7.7	17.4	11.9	58.4	4.6	Wis. Ex. Sta. Rep., 1886, p. 99	3005
3006	Not described	10.00	5.49	16.77	6.84	55.43	5.47	6.1	18.6	7.6	61.6	6.1	Mass. State Ex. Sta. Rep., 1886, p. 38	3006
3007	Do	9.27	6.57	16.05	12.26	52.11	3.74	7.2	17.7	13.5	57.5	4.1	N. Y. State Ex. Sta. Rep., 1886, p. 366	3007
3008	Do	12.48	6.60	15.06	8.48	53.20	4.18	7.5	17.2	9.6	60.9	4.8	Conn. State Ex. Sta. Rep., 1886, p. 113	3008
3009	Do	12.28	6.14	13.20	9.24	54.84	4.30	6.9	15.0	10.5	62.7	4.9	Ontario Agr. Col. Bul. 14, 1887, p. 5	3009
3010	Do	14.30	6.13	12.75	11.83	51.49	3.50	7.1	14.8	13.6	60.4	4.1	do	3010
3011	Do	13.00	6.00	14.50	9.40	53.60	3.50	6.9	16.6	10.8	61.7	4.0	do	3011
3012	Coarse bran	11.40	5.10	12.90	8.10	59.00	3.50	5.8	14.6	9.1	66.5	4.0	do	3012
3013	Not described	10.87	5.26	17.50	7.37	55.08	3.92	5.9	19.6	8.3	61.8	4.4	Mass. State Ex. Sta. Rep., 1887, p. 32	3013
3014	Do	11.14	5.86	15.75	11.37	50.55	5.33	6.6	17.7	12.8	56.9	6.0	Mass. State Ex. Sta. Rep., 1887, p. 52	3014
3015	Do	10.38	6.20	14.56	12.78	51.77	4.31	6.9	16.3	14.3	57.7	4.8	Mass. State Ex. Sta. Rep., 1887, p. 103	3015
3016	Do. *c*	12.20	6.44	17.37	9.59	51.94	2.46	7.3	19.8	10.9	59.2	2.8	do	3016
3017	Do	10.49	5.67	16.62	7.93	52.79	6.50	6.3	18.6	8.9	58.9	7.3	Vt. Ex. Sta. Rep., 1887, p. 134	3017
3018	Do	8.58	7.08	18.87	10.55	47.87	6.95	7.7	20.6	11.5	52.6	7.6	Vt. Ex. Sta. Rep., 1887, p. 137	3018
3019	Do	10.87	6.55	15.12	9.25	53.66	4.55	7.3	17.0	10.4	60.2	5.1	Mass. Ex. Sta. Rep., 1888, p. 49	3019
3020	Do	12.50	5.95	15.57	9.36	51.82	4.80	6.8	17.8	10.7	59.2	5.5	Mass. Ex. Sta. Rep., 1888, p. 82	3020

3021	Do. *c*	9.43	5.88	15.18	11.76	54.00	3.95	6.3	16.8	13.0	59.5	4.4	Mass. Ex. Sta. Rep., 1888, p. 87	3021
3022	Do	9.25	7.17	14.63	9.12	55.54	4.29	7.9	16.1	10.1	61.2	4.7	Mass. Ex. Sta. Rep., 1888, p. 88	3022
3023	Do	9.89	6.54	16.37	13.34	48.16	5.70	7.3	18.2	14.8	54.5	5.2	Mass. Ex. Sta. Rep., 1888, p. 89	3023
3024	Do	13.17	7.29	14.65	8.20	52.89	3.80	8.4	16.8	9.4	61.0	4.4	Ark. Ex. Sta. Rep., 1888, p. 133	3024
3025	Do. *a*	12.50	6.03	17.02	10.25	49.94	4.26	6.9	19.5	11.7	57.0	4.9	Wis. Ex. Sta. Rep., 1888, p. 31	3025
3026	Do	9.97	6.04	16.75	9.56	51.64	7.04	6.7	17.5	10.6	56.4	7.8	Vt. Ex. Sta. Rep., 1888, p. 76	3026
3027	Do	14.27	5.71	17.14	8.52	50.33	4.03	6.7	20.0	9.9	58.7	4.7	N. Y. Ex. Sta. Rep., 1888, p. 39	3027
3028	Do	14.33	5.40	15.15	8.51	53.41	3.20	6.3	17.7	9.9	62.4	3.7	do	3028
3029	Do	9.39	4.84	16.60	4.10	59.72	5.35	5.3	18.3	4.5	65.9	6.0	Colo. Ex. Sta. Bul. 8, 1889	3029
3030	Do. *a*	14.55	5.30	14.00	7.78	54.61	3.76	6.2	16.4	9.1	63.9	4.4	Wis. Ex. Sta. Rep., 1889, p. 73	3030
3031	Do	10.08	5.75	15.92	9.62	54.77	3.86	6.4	17.7	10.7	60.9	4.3	Mass. State Ex. Sta. Rep., 1889, p. 31	3031
3032	Do	9.57	5.33	15.43	9.11	56.24	4.32	5.9	17.1	10.0	62.2	4.8	Mass. State Ex. Sta. Rep., 1889, p. 129	3032
3033	Do	11.34	5.81	16.08	9.96	52.70	4.11	6.6	18.1	11.3	59.4	4.6	do	3033
3034	Do	9.34	6.05	16.44	9.87	55.05	3.25	6.7	18.1	10.9	60.7	3.6	Mass. State Ex. Sta. Rep., 1889, p. 130	3034
3035	Do	10.41	6.26	15.25	10.77	52.42	4.89	7.0	17.0	12.0	58.5	5.5	do	3035
3036	Do	11.42	6.20	15.33	9.77	52.50	4.78	7.0	17.3	11.0	50.3	5.4	Mass. State Ex. Sta. Rep., 1889, p. 131	3036
3037	Do	8.85	6.87	15.00	8.78	55.80	4.70	7.5	16.5	9.6	61.2	5.2	do	3037
3038	Do	8.10	6.33	15.36	9.86	55.39	4.96	6.9	16.7	10.7	60.3	5.4	Mass. State Ex. Sta. Rep., 1889, p. 132	3038
	All complete analyses of wheat bran. Maximum	15.83	7.29	18.87	15.50	63.15	7.04	8.4	20.6	17.7	72.4	7.8		
	Minimum	7.38	2.50	12.13	2.35	45.53	1.50	2.9	13.7	2.7	52.1	1.8		
	Average	**11.91**	**5.78**	**15.42**	**8.99**	**53.87**	**4.03**	**6.6**	**17.4**	**10.2**	**61.3**	**4.5**		
	Wheat middlings:													
3039	St. Louis middlings	12.08	1.57	11.06	3.57	69.21	2.51	1.8	12.6	4.0	78.7	2.9	Bussey Inst. Bul., 1874, p. 27	3039
3040	Illinois middlings	13.30	2.71	10.13	5.37	64.78	3.71	3.1	11.7	6.2	74.7	4.3	do	3040
3041	St. Louis ship stuff	11.81	2.25	11.12	5.59	66.46	2.77	2.6	12.7	6.3	75.3	3.1	do	3041
3042	Not described	10.56	3.45	14.22	5.35	62.90	3.52	3.9	15.9	6.0	70.3	3.9	Conn. State Ex. Sta. Rep., 1877, p. 59	3042
3043	No. 1 middlings	11.32	1.39	10.48	3.88	70.86	2.07	1.6	11.8	4.4	79.9	2.3	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 26.	3043
3044	No. 2 middlings	12.27	4.06	13.33	7.44	60.21	2.68	4.6	15.2	8.5	68.6	3.1	do	3044
3045	Not described	11.27	2.11	13.75	3.47	65.71	3.69	2.4	15.5	3.9	74.0	4.2	Mich. Bd. Agr. Rep., 1878, p. 410	3045
3046	Mill feed	11.29	2.24	11.38	5.22	65.52	4.35	2.5	12.8	5.9	73.9	4.9	do	3046
3047	Not described	13.85	2.45	15.00	1.27	63.70	3.73	2.8	17.4	1.5	74.0	4.3	Conn. State Ex. Sta. Rep., 1883, p. 87	3047
3048	Do	11.62	.....	14.25	.....	.....	3.50	.....	16.7	.....	.....	4.0	do	3048
3049	Do	11.35	.....	14.31	.....	.....	3.98	.....	16.2	.....	.....	4.5	do	3049
3050	Fancy middlings	10.93	2.41	15.21	2.00	65.84	3.61	2.7	17.1	2.3	73.8	4.1	Conn. State Ex. Sta. Rep., 1884, p. 108	3050
3051	Not described	9.25	4.82	16.50	7.62	55.94	5.87	5.3	18.2	8.4	61.6	6.5	Mass. State Ex. Sta. Rep., 1885, p. 101	3051
3052	Do	13.77	3.65	12.45	4.42	60.83	4.88	4.2	14.4	5.1	70.6	5.7	N. Y. State Ex. Sta. Rep., 1885, p. 306	3052
3053	Ship stuff	16.00	6.32	14.96	4.77	53.86	4.09	7.5	17.8	5.7	64.1	4.9	do	3053
3054	Do	14.17	4.44	16.63	6.30	53.74	4.72	5.2	19.4	7.3	62.6	5.5	do	3054
3055	Not described	10.23	3.58	19.18	3.28	59.16	4.57	4.0	21.3	3.6	66.0	5.1	Conn. State Ex. Sta. Rep., 1885, p. 36	3055
3056	From spring wheat	13.00	4.09	17.94	7.04	53.02	4.91	4.7	20.6	8.1	61.0	5.6	do	3056
3057	Do	12.73	3.75	17.63	4.31	57.38	4.20	4.3	20.2	4.9	65.8	4.8	do	3057
3058	Do	13.68	2.13	18.19	1.90	60.95	3.15	2.5	21.1	2.2	70.6	3.6	do	3058
3059	Ship stuff *b*	9.22	3.02	16.10	12.66	54.86	4.14	3.3	17.7	13.9	60.6	4.5	Mo. Agr. Col. Farm Bul. 14, 1885, p. 4.	3059
3060	Not described *b*	12.51	1.94	14.88	67.76		2.91	2.2	16.9	77.6		3.3	N. J. Ex. Sta. Rep., 1885, p. 168	3060
3061	Do. *b*	13.04	2.02	14.75	67.19		3.00	2.3	16.9	77.4		3.4	do	3061
3062	Do. *b*	10.80	2.10	13.62	70.96		2.52	2.4	15.2	79.6		2.8	do	3062
3063	New-process middlings *b*	12.03	2.23	14.75	67.05		3.94	2.5	16.7	76.4		4.4	do	3063

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM WHEAT—continued.													
	Wheat middlings—Continued.	%	%	%	%	%	%	%	%	%	%	%		
3064	Old-process middlings *b*	13.66	2.03	13.25	67.81		3.25	2.3	15.4	78.5		3.8	N. J. Ex. Sta. Rep., 1885, p. 168	3064
3065	Western middlings *b*	12.33	3.32	16.00	64.43		3.92	3.8	18.2	73.6		4.4	do	3065
3066	Do. *b*	9.82	2.81	16.69	67.40		3.28	3.1	18.4	74.8		3.7	do	3066
3067	Do. *b*	12.06	4.52	16.81	62.88		3.73	5.1	19.0	71.7		4.2	do	3067
3068	Do. *b*	12.75	1.61	12.94	69.98		2.72	1.8	14.7	80.4		3.1	do	3068
3069	Do. *b*	12.96	3.29	16.88	63.23		3.63	3.8	19.3	72.8		4.1	do	3069
3070	White middlings *b*	12.37	1.68	14.00	69.18		2.77	1.9	16.0	78.9		3.2	do	3070
3071	Brown middlings *b*	12.39	2.67	14.69	66.56		3.69	3.1	16.8	75.9		4.2	do	3071
3072	Flour middlings *b*	11.43	2.24	16.13	66.77		3.43	2.5	18.2	75.5		3.8	do	3072
3073	Round stuff or middlings *b*	11.93	2.11	14.50	68.12		3.34	2.4	16.4	77.5		3.7	do	3073
3074	Western wheat feed *b*	10.66	5.28	16.00	63.79		4.27	5.9	17.9	71.4		4.8	do	3074
3075	Wheat ship stuff *b*	11.83	6.12	15.00	64.60		2.45	6.9	17.0	73.3		2.8	do	3075
3076	Not described	10.55	2.21	17.22	1.25	64.97	3.80	2.5	19.2	1.4	72.6	4.3	Mass. State Ex. Sta. Rep., 1886, p. 39	3076
3077	Do	9.85	2.28	15.53	2.48	66.98	2.88	2.5	17.2	2.7	74.4	3.2	do	3077
3078	Do	9.44	3.75	17.99	4.70	59.90	4.22	4.1	19.9	5.2	66.1	4.7	N. Y. State Ex. Sta. Rep., 1886, p. 366	3078
3079	Do	13.77	3.68	15.60	4.44	57.68	4.83	4.2	18.4	5.1	66.6	5.7	do	3079
3080	Ship stuff	14.17	4.44	16.63	6.30	53.74	4.72	5.2	19.4	7.3	62.6	5.5	do	3080
3081	Do	15.20	3.65	16.13	2.62	57.99	4.41	.....	.....	.....	.....	.....	Mo. Agr. Col. Farm Bul. 19, 1886, p. 3.	3081
3082	Not described *c*	9.54	4.04	17.60	5.10	58.29	5.43	4.5	19.5	5.6	64.4	6.0	Mass. State Ex. Sta. Rep., 1887, p. 104.	3082
3083	Do	11.82	3.27	17.76	3.07	59.83	4.25	3.7	20.1	3.5	67.8	4.9	Mo. Agr. Col. Farm Bul. 27, 1887, p. 6.	3083
3084	Fine middlings	12.10	3.78	18.12	5.76	55.34	4.90	4.3	20.6	6.6	62.9	5.6	Conn. State Ex. Sta. Rep., 1888, p. 149	3084
3085	Flour middlings	12.75	2.41	18.81	1.40	60.31	4.32	2.8	21.4	1.6	69.3	4.9	do	3085
3086	Special middlings	12.45	3.87	18.50	5.08	56.60	3.50	4.5	21.1	5.7	64.7	4.0	do	3086
3087	Not described	12.47	3.33	19.96	3.89	57.17	3.18	3.8	22.8	4.5	65.3	3.6	N. H. Ex. Sta. Bul. 8, 1888	3087
3088	Do. *b*	12.43	4.08	14.71	5.64	59.84	3.30	4.2	15.1	5.8	71.5	3.4	Mass. State Ex. Sta. Bul. 37, 1890	3088
	All complete analyses: Maximum	16.00	6.32	19.96	12.66	70.86	5.87	7.5	22.8	13.9	79.9	6.5		
	All complete analyses: Minimum	9.22	1.39	10.13	1.25	53.02	2.07	1.6	11.7	1.4	60.6	2.3		
	All complete analyses: Average	**12.10**	**3.29**	**15.62**	**4.60**	**60.42**	**3.97**	**3.8**	**17.8**	**5.2**	**68.7**	**4.5**		

	Wheat shorts:													
3089	St. Louis shorts	12.23	4.53	12.06	7.12	60.05	4.01	5.2	13.7	8.1	08.4	4.6	Bussey Inst. Bul., 1874, p. 27	3089
3090	Illinois shorts	10.96	4.24	11.13	7.29	62.32	4.06	4.8	12.5	8.2	69.9	4.6	do	3090
3091	Michigan shorts	11.77	4.06	12.75	10.47	56.30	4.65	4.6	14.4	11.9	63.8	5.3	do	3091
3092	Not described	11.31	3.94	13.91	6.34	62.00	2.50	4.4	15.7	7.0	70.1	2.8	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 26.	3092
3093	Do	11.26	3.95	15.13	7.46	57.35	4.85	4.5	17.1	8.4	64.5	5.5	Mich. Bd. Agr. Rep., 1878, p. 410	3093
3094	Do	13.59	5.23	13.87	8.99	55.62	2.70	6.1	16.0	10.4	64.4	3.1	Conn. State Ex. Sta. Rep., 1883, p. 87	3094
3095	Fine shorts *b*	12.06	1.99	13.44	69.11		3.40	2.3	15.2	78.6		3.9	N. J. Ex. Sta. Rep., 1885, p. 168	3095
3096	Not described	15.52	4.00	10.06	5.84	53.26	5.32	4.7	19.0	6.9	63.1	6.3	Wis. Ex. Sta. Rep., 1886, p. 96	3096
3097	Do	15.33	4.07	15.69	6.10	53.74	5.07	4.8	18.5	7.2	63.5	6.0	do	3097
3098	Do*	11.80	4.30	13.10	7.90	67.00	3.70	.....	.....	.....	.....	.....	Ky. Ex. Sta. Bul. 3, 1886, p. 3	3098
3099	Do	4.05	5.74	19.37	7.90	56.82	6.12	6.0	20.2	8.2	59.2	6.4	Wis. Ex. Sta. Rep., 1888, p. 141	3099
3100	Do	11.31	4.92	14.75	6.09	58.13	4.80	5.5	17.7	6.9	64.5	5.4	Minn. Ex. Sta. Bul. 8, 1889, p. 14	3100
3101	Do	12.15	4.78	16.50	6.04	54.85	5.62	5.4	18.9	6.9	62.4	6.4	do	3101
3102	Do	12.29	6.21	17.85	9.21	49.97	4.47	7.1	20.3	10.5	57.0	5.1	N. H. Ex. Sta. Bul. 8, 1888	3102
	All complete analyses, excluding No. 3098. Maximum	15.52	6.21	19.37	10.47	62.32	6.12	7.1	20.3	11.9	70.1	6.4		
	Minimum	4.05	1.99	11.13	6.04	49.97	2.50	2.3	12.5	6.9	57.0	2.8		
	Average	**11.81**	**4.64**	**14.92**	**7.40**	**56.72**	**4.51**	**5.2**	**16.8**	**8.4**	**64.5**	**5.1**		
	WASTE PRODUCTS SEPARATED FROM WHEAT.													
	Wheat screenings:													
3103	Broken and shrunken wheat, chess, cockle, and seeds of other weeds. *a*	7.80	3.80	14.78	4.95	66.02	2.65	4.1	16.0	5.4	71.6	2.9	Mich. Ex. Sta. Bul. 49, 1889	3103
3104	Do. *a*	8.40	3.76	15.06	6.10	63.65	3.03	4.1	16.5	6.7	69.4	3.3	do	3104
3105	No particulars given	12.75	2.76	8.31	6.82	66.11	3.25	3.2	9.6	7.8	75.7	3.7	Univ. Minn. Ex. Sta. Bul. 8, 1889, p. 14	3105
3106	Do	12.28	3.62	12.06	7.47	61.25	3.32	4.1	13.8	8.5	69.8	3.8	do	3106
3107	Do	11.79	1.89	9.06	4.22	70.38	2.66	2.1	10.2	4.8	79.9	3.0	do	3107
3108	Do	13.60	2.16	12.44	1.69	67.30	2.81	2.5	14.4	2.0	77.9	3.2	do	3108
3109	Do	11.40	3.38	11.75	5.66	64.77	3.04	3.8	13.3	6.4	73.1	3.4	do	3109
3110	Do	12.61	2.35	15.19	3.36	63.45	3.04	2.7	17.3	3.8	72.7	3.5	do	3110
3111	Do	13.55	2.13	16.88	3.63	61.01	2.80	2.5	19.6	4.2	70.5	3.2	do	3111
3112	Do	12.04	3.21	8.94	5.45	67.49	2.87	3.6	10.2	6.2	76.7	3.3	do	3112
	Maximum	13.60	3.80	16.88	7.47	70.38	3.32	4.1	19.6	8.5	79.9	3.8		
	Minimum	7.80	1.89	8.31	1.69	61.01	2.65	2.1	9.6	2.0	69.4	2.9		
	Average	**11.62**	**2.91**	**12.48**	**4.93**	**65.11**	**2.95**	**3.3**	**14.1**	**5.5**	**73.7**	**3.4**		
3113	Screenings meal	12.58	3.21	6.56	5.69	68.21	3.75	3.7	7.5	6.5	78.1	4.2	do	3113
3114	Do	7.32	2.92	8.99	6.64	71.38	2.75	3.2	9.7	7.2	76.9	3.0	do	3114
	Average	**9.95**	**3.06**	**7.78**	**6.16**	**69.80**	**3.25**	**3.4**	**8.7**	**6.9**	**77.3**	**3.7**		

* Adds 107.80.

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued													
	WASTE PRODUCTS SEPARATED FROM WHEAT—continued.	%	%	%	%	%	%	%	%	%	%	%		
3115	Flour of screenings	13.32	2.92	9.38	8.99	62.27	3.12	3.4	10.8	10.3	71.9	3.6	Univ. Minn. Ex. Sta. Bul. 8, 1889, p. 14	3115
3116	Do	12.14	2.92	7.25	3.83	69.89	3.97	3.3	8.3	4.4	79.5	4.5	do	3116
3117	Do	13.20	3.19	10.19	3.80	65.86	3.76	3.7	11.7	4.4	75.9	4.3	do	3117
	Average	**12.88**	**3.01**	**8.94**	**5.54**	**66.01**	**3.62**	**3.4**	**10.2**	**6.3**	**76.0**	**4.1**		
3118	Cockle bran	11.37	3.02	9.44	10.97	62.39	2.81	3.4	10.7	12.4	70.3	3.2	do	3118
3119	Do	11.84	3.09	10.50	9.08	63.37	2.12	3.5	11.9	10.2	72.0	2.4	do	3119
3120	Do	10.18	3.55	11.92	7.58	64.36	2.41	3.9	12.2	8.4	71.8	2.7	do	3120
	Average	**11.13**	**3.22**	**10.62**	**9.21**	**62.37**	**2.45**	**3.6**	**11.9**	**10.3**	**71.4**	**2.8**		
	BY-PRODUCTS FROM RICE.													
3121	Rice bran	9.30	8.35	12.78	2.00	62.34	5.23	9.3	14.0	2.2	68.8	5.7	U. S. Dept. Agr. Rep., 1880, p. 169	3121
3122	Rice bran, "Douse"	8.78	12.40	10.93	17.76	41.93	8.20	13.6	11.9	19.4	46.1	9.0	N. C. Ex. Sta. Rep., 1882, p. 91	3122
3123	Rice bran, No. 1	9.96	9.26	13.56	7.00	49.32	10.90	10.3	15.0	7.9	54.8	12.0	La. Dept. Agr. Bul. 9, p. 35	3123
3124	Rice bran, No. 2	9.56	8.82	11.81	9.85	50.46	9.50	9.7	13.0	10.9	56.0	10.4	do	3124
3125	Rice bran *a*	10.67	11.00	11.29	10.95	46.02	9.97	12.4	12.6	12.3	51.6	11.1	La. Ex. Sta. Bul. 24, p. 389	3125
	Maximum	10.67	12.40	13.56	17.76	62.34	10.90	13.6	15.0	19.4	68.8	12.0		
	Minimum	8.78	8.35	10.93	2.00	41.93	5.23	9.3	11.9	2.2	46.1	5.7		
	Average	**9.65**	**9.97**	**12.07**	**9.51**	**50.04**	**8.76**	**11.0**	**13.4**	**10.4**	**55.5**	**9.7**		
3126	Rice hulls, lowland	7.70	15.10	4.68	30.27	41.60	0.65	16.3	5.1	32.8	45.1	0.7	N. C. Ex. Sta. Rep., 1882, p. 91	3126
3127	Rice hulls, upland	8.50	10.52	3.12	38.57	38.74	0.55	11.4	3.5	42.1	42.4	0.6	do	3127
3128	Rice hulls *a*	8.27	13.85	2.89	38.15	35.99	0.85	15.1	3.2	41.6	39.2	0.9	La. Ex. Sta. Bul. 24, p. 389	3128
	Average	**8.16**	**13.16**	**3.56**	**35.67**	**38.77**	**0.68**	**14.4**	**3.9**	**38.8**	**42.2**	**0.7**		
3129	Rice polish	11.21	2.80	12.93	2.41	62.96	7.69	3.2	14.4	2.7	71.1	8.6	N. C. Ex. Sta. Rep., 1882, p. 91	3129
3130	Rice polish, No. 1	9.00	7.37	11.37	5.86	59.90	6.50	8.1	12.5	6.4	65.9	7.1	La. Dept. Agr. Bul. 9, p. 35	3130

3131	Rice polish, No. 2	9.33	11.30	11.38	14.45	45.54	8.00	12.1	12.5	15.9	50.7	8.8	do	3131
3132	Rice polish *a*	10.63	5.45	10.94	2.62	63.34	7.02	6.1	12.2	2.9	70.9	7.9	La. Ex. Sta. Bul. 24, p. 389	3132
	Average	**10.04**	**6.73**	**11.65**	**6.33**	**57.95**	**7.30**	**7.4**	**12.9**	**7.0**	**64.0**	**8.1**		
	BY-PRODUCTS FROM BUCKWHEAT.													
3133	Buckwheat bran *b*	13.22	4.48	29.06	56.71		5.53	5.2	23.1	65.4		6.3	N. J. Ex. Sta. Rep., 1885, p. 168	3133
3134	Do. *b*	13.04	3.75	23.53	53.27		6.08	4.4	26.9	61.7		7.9	do	3134
3135	Buckwheat bran and middlings *b*	13.06	3.59	18.87	59.58		4.90	4.1	21.6	68.7		5.6	do	3135
3136	Do. *b*	14.55	3.50	17.38	59.99		4.58	4.1	20.3	70.2		5.4	do	3136
3137	Buckwheat bran, old process *b*	16.94	2.42	10.00	69.35		2.19	2.9	11.9	82.6		2.6	do	3137
3138	Buckwheat bran	14.00	3.40	17.10	14.79	46.40	4.40	4.0	19.9	17.0	54.0	5.1	Ontario Agr. Col. Bul. 14, 1887, p. 6	3138
3139	Do	9.93	3.42	6.44	31.36	47.68	2.07	3.8	7.1	34.5	52.3	2.3	Vt. Ex. Sta. Rep., 1887, p. 134	3139
3140	Buckwheat hulls	14.07	2.27	4.87	38.49	39.20	1.10	2.7	5.7	44.7	45.7	1.2	Conn. State Ex. Sta. Rep., 1886, p. 111	3140
3141	Buckwheat middlings	16.33	5.50	30.31	4.02	36.29	7.55	6.6	36.1	4.8	43.5	9.0	do	3141
3142	Do	9.52	4.54	25.13	2.43	52.71	5.67	5.9	27.8	2.7	58.2	6.3	Vt. Ex. Sta. Rep., 1887, p. 133	3142
3143	Do	13.71	4.35	31.25	5.79	36.93	8.06	5.1	36.2	6.6	42.9	9.2	Conn. State Ex. Sta. Rep., 1888, p. 152	3143
	Average	**13.18**	**4.79**	**28.89**	**4.05**	**41.99**	**7.10**	**5.5**	**33.3**	**4.6**	**48.5**	**8.1**		
	BY-PRODUCTS FROM COTTON SEED.													
3144	Cotton-seed cake	6.82	7.89	44.41	11.76	12.74	16.47	8.4	47.6	12.6	13.7	17.7	Trans. Conn. Agr. Soc., 1857, p. 84	3144
3145	Cotton-seed meal	7.24	5.83	41.45	3.08	24.30	18.01	6.3	44.7	3.3	26.3	19.4	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38.	3145
3146	Do	8.19	7.95	43.40	6.48	20.12	13.95	8.8	47.2	7.1	21.7	15.2	U. S. Dept. Agr. Rep., 1880, p. 169	3146
3147	Do	8.69	7.34	44.56	3.88	23.56	11.97	8.1	48.8	4.3	25.6	13.2	N. J. Ex. Sta. Rep., 1880, p. 46	3147
3148	Do	8.87	6.99	45.00	4.65	22.89	11.60	7.7	49.4	5.1	25.1	12.7	Conn. State Ex. Sta. Rep., 1880, p. 84	3148
3149	Do	8.87	7.34	43.06	4.83	23.73	12.17	8.1	47.2	5.3	26.0	13.4	do	3149
3150	Do	9.96	7.50	42.50	4.24	22.12	14.58	8.2	46.7	4.7	24.3	16.1	Conn. State Ex. Sta. Rep., 1881, p. 84	3150
3151	Do	8.99	8.30	43.75	4.09	19.07	15.89	9.1	48.0	4.5	20.9	17.5	U. S. Dept. Agr. Rep., 1881–'82, p. 553	3151
3152	Do	7.62	6.38	47.60	8.18	15.68	14.54	6.9	51.5	8.9	16.9	15.8	do	3152
3153	Do	5.78	5.73	50.81	4.59	21.82	11.29	6.1	53.9	4.9	23.1	12.9	N. J. Ex. Sta. Rep., 1882, p. 70	3153
3154	Do	7.57	6.58	46.69	3.70	21.32	14.14	7.1	59.5	4.0	23.9	15.4	do	3154
3155	Do	9.00	8.80	40.20	5.20	24.30	12.50	9.6	44.1	5.7	26.9	13.7	Agr. of Me., 1882, p. 302	3155
3156	Do	8.82	6.71	40.00	4.83	25.19	13.55	7.3	44.8	5.3	27.8	14.8	N. Y. Cornell Ex. Sta. Rep., 1883, p. 41	3156
3157	Do	7.61	6.53	46.12	4.90	21.67	13.17	7.1	49.9	5.3	23.5	14.2	Conn. State Ex. Sta. Rep., 1883, p. 89	3157
3158	Do	7.29	6.85	45.31	5.32	21.93	13.30	7.4	48.9	5.7	23.7	14.3	do	3158
3159	Do. *b*	6.65	7.71	43.69	4.30	27.41	10.24	8.3	46.7	4.7	29.3	11.0	N. J. Ex. Sta. Rep., 1883, p. 74	3159
3160	Do. *b*	6.89	7.89	42.56	8.05	21.58	13.12	8.3	45.7	8.6	23.3	14.1	do	3160
3161	Do	9.13	6.91	42.75	5.71	23.84	11.66	7.6	47.9	6.3	26.3	12.8	Mass. State Ex. Sta. Rep., 1883, p. 84	3161
3162	Do	8.38	7.79	38.91	6.17	26.89	11.86	8.5	42.5	6.7	29.4	12.9	Mass. State Ex. Sta. Rep., 1883, p. 85	3162
3163	Cotton-seed meal, new (roller) process	7.19	8.68	39.56	7.00	24.89	12.77	9.3	42.6	7.5	26.9	13.7	do	3163
3164	Cotton-seed meal, old (press) process	8.15	6.84	33.54	6.80	31.98	13.59	7.5	36.5	7.4	33.9	14.7	Mass. State Ex. Sta. Rep., 1883, p. 86	3164
3165	Cotton-seed meal	7.09	8.50	23.27	9.78	38.68	12.68	9.2	25.9	10.5	41.7	13.6	Mass. State Ex. Sta. Rep., 1883, p. 87	3165
3166	Do	7.59	6.48	44.00	2.77	25.72	13.44	7.9	47.6	3.0	27.9	14.5	Univ. Wis. Ex. Sta. Bul. 3, p. 6	3166
3167	Do	18.52	6.55	35.21	5.96	21.44	12.32	8.0	43.2	7.3	26.4	15.1	N. Y. Ex. Sta. Rep., 1884, p. 333	3167
3168	Do. *b*	10.67	6.63	43.25	29.96		10.39	7.4	48.4	32.6		11.6	N. J. Ex. Sta. Rep., 1885, p. 172	3168
3169	Do. *b*	7.99	6.43	44.31	28.39		12.88	7.9	48.1	30.9		14.9	do	3169

ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM COTTON SEED—continued.	%	%	%	%	%	%	%	%	%	%	%		
3170	Cotton-seed meal	8.50	7.00	43.75	4.75	21.40	14.60	7.7	47.8	5.2	23.4	15.9	Me. Ex. Sta. Rep., 1885–'86, p. 51	3170
3171	Do	8.45	8.41	41.88	3.45	20.94	16.87	9.2	45.7	3.8	22.9	18.4	N. Y. State Ex. Sta. Rep., 1886, p. 366	3171
3172	Do	7.95	6.96	44.00	4.10	21.93	15.06	7.6	47.8	4.5	23.7	16.4	Conn. State Ex. Sta. Rep., 1886, p. 113	3172
3173	Do	8.90	7.27	43.94	9.61	19.40	10.88	8.0	48.2	10.5	21.4	11.9	Me. Ex. Sta. Rep., 1886–'87, p. 68	3173
3174	Do	7.87	6.94	46.12	6.79	21.00	11.28	7.5	50.1	7.4	22.8	12.2	do	3174
3175	Do	6.64	7.90	40.42	5.85	24.22	14.97	8.5	43.3	6.3	25.9	16.0	Vt. Ex. Sta. Rep., 1887, p. 133	3175
3176	Do	6.46	6.88	39.37	5.38	28.68	13.23	7.4	42.1	5.8	30.6	14.1	Vt. Ex. Sta. Rep., 1887, p. 136	3176
3177	Do	9.55	7.20	44.22	6.50	23.77	8.76	8.0	48.9	7.2	26.2	9.7	Ark. Ex. Sta. Rep., 1888, p. 133	3177
3178	Do	6.84	6.58	37.39	10.09	26.99	12.23	7.1	40.1	10.8	29.0	13.0	Mass. State Ex. Sta. Rep., 1888, p. 93	3178
3179	Do	6.68	6.65	43.56	8.14	17.17	17.20	7.1	46.7	8.7	19.1	18.4	Vt. Ex. Sta. Rep., 1888, p. 76	3179
3180	Do. *a*	6.43	7.23	44.61	1.28	28.93	11.52	7.7	47.7	1.4	30.9	12.3	N. Y. State Ex. Sta. Rep., 1888, p. 238	3180
3181	Do	8.86	5.81	46.32	6.38	23.68	8.95	6.4	50.8	7.0	26.0	9.8	N. H. Ex. Sta. Bul. 8, 1888	3181
	All analyses: Maximum	18.52	8.80	50.81	10.09	38.68	18.01	9.6	53.9	12.6	41.7	19.4		
	All analyses: Minimum	5.78	5.73	23.27	1.28	15.68	8.76	6.1	25.0	1.4	13.7	9.7		
	All analyses: Average	**8.17**	**7.17**	**42.31**	**5.62**	**23.65**	**13.08**	**7.8**	**46.1**	**6.1**	**25.8**	**14.2**		
3182	Cotton-seed bran	11.99	2.18	6.37	30.83	47.33	1.33	2.5	7.3	35.0	53.7	1.5	Conn. Ex. Sta. Rep., 1888, p. 145	3182
3183	Cotton-seed hulls *c*	10.17	2.47	4.40	46.17	34.67	2.12	2.7	4.9	51.4	38.6	2.4	Mass. Ex. Sta. Rep., 1888, p. 92	3183
3184	Do. *c*	11.45	3.00	4.76	35.75	41.24	3.80	3.4	5.4	40.2	46.7	4.3	do	3184
3185	Do	10.05	2.58	3.46	44.35	38.12	1.44	2.9	3.9	49.3	42.3	1.6	Ark. Ex. Sta. Bul. 9, 1889	3185
3186	Do	9.96	2.30	3.56	51.40	32.03	0.75	2.6	4.0	57.1	35.4	0.9	Ga. Ex. Sta. Bul. 7, 1890	3186
	Average, excluding 3182	**10.41**	**2.59**	**4.04**	**44.42**	**36.52**	**2.02**	**2.9**	**4.5**	**49.5**	**40.9**	**2.2**		
	BY-PRODUCTS FROM LINSEED.													
3187	Linseed cake, old process	10.04	5.10	28.73	12.41	33.47	10.25	5.7	31.9	13.8	37.2	11.4	N. Y. State Ex. Sta. Rep., 1885, p. 306	3187
3188	Linseed cake, old process, made in Canada	8.61	6.47	30.00	7.01	36.77	11.14	7.1	32.8	7.7	40.4	12.0	Ontario Agr. Col. Bul. 34, 1888	3188
3189	Linseed cake, unclassified, ground *c*	8.35	6.89	34.14	7.97	37.43	5.22	7.5	37.3	8.7	40.8	5.7	Mass. State Ex. Sta. Rep., 1883, p. 83	3189
3190	Do. *b*	10.34	5.87	34.93	9.36	33.44	6.06	6.8	39.0	10.5	37.0	6.7	N. J. Ex. Sta. Rep., 1883, p. 74	3190
3191	Do	10.59	6.15	34.19	8.33	36.74	5.00	6.9	38.2	9.3	41.1	4.5	N. J. Ex. Sta. Rep., 1884, p. 106	3191
3192	Do	10.80	4.95	31.81	8.43	39.11	4.90	5.6	35.6	9.4	43.9	5.5	do	3192

3193	Linseed meal, old process	9.13	8.16	32.43	7.26	31.45	11.57	4.0	35.7	8.0	34.6	12.7	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38.	3193
3194	Do	6.17	5.36	27.68	7.57	41.89	11.33	5.6	29.5	8.0	44.8	12.1	N. J. Ex. Sta. Rep., 1880, p. 47	3194
3195	Do	12.43	5.90	30.88	7.42	36.54	6.83	6.7	35.3	8.4	41.9	7.7	N. J. Ex. Sta. Rep., 1882, p. 70	3195
3196	Do	7.13	5.53	33.95	7.12	41.11	5.16	5.9	36.6	7.7	44.2	5.6	N. Y. Cornell Ex. Sta. Rep., 1883, p. 41.	3196
3197	Do	8.07	5.33	31.71	12.31	34.38	8.20	5.8	34.5	13.4	37.4	8.9	N. Y. State Ex. Sta. Rep., 1884, p. 332	3197
3198	Do	10.00	5.08	31.38	12.90	31.29	9.35	5.6	34.9	14.3	34.8	10.4	do	3198
3199	Do	12.39	6.29	31.50	8.03	36.73	5.06	7.2	35.9	9.1	42.0	5.8	N. J. Ex. Sta. Rep., 1884, p. 106	3199
3200	Do	9.43	5.24	32.03	11.06	35.71	6.53	5.8	35.4	12.2	39.4	7.2	N. Y. State Ex. Sta. Rep., 1885, p. 306	3200
3201	Do.*	8.07	6.00	32.20	9.73	39.97	6.03	6.5	34.8	10.7	41.5	6.5	Ohio Ex. Sta. Rep., 1885, p. 235	3201
3202	Do. *b*	9.75	6.61	32.00	44.95		6.69	7.3	35.5	49.8		7.4	N. J. Ex. Sta. Rep., 1885, p. 172	3202
3203	Do. *b*	9.32	5.70	34.25	43.60		7.13	6.3	37.7	48.1		7.9	do	3203
3204	Do. *b*	10.30	5.36	32.19	44.35		7.80	6.0	35.9	49.4		8.7	do	3204
3205	Do. *b*	10.19	5.54	33.63	42.91		7.73	6.1	37.3	47.9		8.7	do	3205
3206	Do. *b*	10.52	5.50	32.94	43.82		7.22	6.1	36.9	48.9		8.1	do	3206
3207	Do. *b*	6.69	6.31	31.81	47.61		7.58	6.7	34.1	51.1		8.1	do	3207
3208	Do. *b*	7.63	5.18	38.19	7.21	32.39	9.40	5.6	41.3	7.8	35.2	10.1	N. J. Ex. Sta. Rep., 1886, p. 164	3208
3209	Do	10.15	5.17	32.57	4.68	39.26	8.17	5.7	36.3	5.2	43.7	9.1	N. Y. State Ex. Sta. Rep., 1886, p. 366	3209
3210	Do	10.53	5.42	31.02	11.46	31.85	9.72	6.0	34.7	12.8	35.6	10.9	do	3210
3211	Do	8.02	7.26	30.75	13.25	30.82	9.89	7.9	32.8	14.3	33.5	10.5	Maine Ex. Sta. Rep., 1886–'87, p. 68	3211
3212	Do	9.85	5.14	35.31	7.89	32.01	9.80	5.7	39.2	8.8	35.5	10.8	do	3212
3213	Do	10.27	5.12	36.06	7.36	34.53	6.66	5.7	40.2	8.2	38.5	7.4	Conn. State Ex. Sta. Rep., 1888, p. 152	3213
3214	Do	5.60	5.02	36.00	8.19	38.71	6.48	5.3	38.1	8.7	41.0	6.9	Vt. Ex. Sta. Rep., 1888, p. 76	3214
3215	Do	8.45	5.30	35.12	7.57	35.79	7.77	5.8	38.4	8.3	39.0	8.5	do	3215
3216	Do. *a*	10.56	4.59	35.94	11.89	28.38	8.64	5.1	40.2	13.3	31.7	9.7	N. Y. State Ex. Sta. Rep., 1888, p. 238	3216
3217	Do. *c*	10.46	6.35	34.56	7.61	33.86	7.16	7.1	38.6	8.5	37.8	8.0	Mass. Ex. Sta. Rep., 1889, p. 136	3217
3218	Do	7.48	5.27	34.42	7.40	38.59	6.85	5.7	37.2	8.0	41.7	7.4	do	3218
3219	Do	10.43	7.52	27.77	8.69	40.04	5.55	8.4	31.0	9.7	44.7	6.2	Mass. Ex. Sta. Rep., 1889, p. 138	3219
	All complete analyses. Maximum	12.43	8.16	38.19	13.25	41.89	11.57	8.4	41.3	14.3	44.8	12.7		
	All complete analyses. Minimum	5.60	4.59	27.68	4.68	28.38	5.08	4.0	29.5	5.2	33.5	5.6		
	All complete analyses. Average	**9.16**	**5.72**	**32.93**	**8.88**	**35.40**	**7.91**	**6.3**	**36.2**	**9.7**	**39.2**	**8.6**		
3220	Linseed meal, new process	10.76	6.71	35.64	8.86	35.22	2.81	7.5	39.9	9.9	39.5	3.2	Conn. Ex. Sta. Rep., 1879, p. 93	3220
3221	Do. *a*	9.35	5.90	37.10	7.58	37.42	2.65	6.5	40.9	8.3	41.3	3.0	U. S. Dept. Agr. Rep., 1880, p. 169	3221
3222	Do	6.79	6.05	27.12	8.00	48.03	4.01	6.5	29.0	8.6	51.7	4.2	N. J. Ex. Sta. Rep., 1880, p. 47	3222
3223	Do	12.91	6.08	32.01	8.77	37.56	2.67	7.0	36.7	10.1	43.1	3.1	Conn. Ex. Sta. Rep., 1881, p. 84	3223
3224	Do	13.35	6.08	34.25	8.00	37.02	1.30	7.0	39.5	9.2	42.8	1.5	Conn. Ex. Sta. Rep., 1883, p. 89	3224
3225	Do. *b*	9.90	5.56	34.56	9.00	37.43	3.56	6.2	38.3	10.0	41.5	4.0	N. J. Ex. Sta. Rep., 1883, p. 74	3225
3226	Do	9.90	6.74	35.81	8.63	36.65	2.27	7.5	39.7	9.6	40.7	2.5	Conn. State Ex. Sta. Rep., 1884, p. 108	3226
3227	Do	7.88	5.38	30.11	13.99	38.28	4.36	5.8	32.7	15.2	41.6	4.7	N. Y. State Ex. Sta. Rep., 1884, p. 332	3227
3228	Do	8.55	5.07	32.35	13.77	38.13	2.13	5.5	35.4	15.1	41.7	2.3	do	3228
3229	Do	12.04	4.96	29.91	10.89	38.87	3.23	5.6	34.0	12.5	44.2	3.7	N. Y. State Ex. Sta. Rep., 1885, p. 306	3229
3230	Do	12.70	5.14	33.25	8.08	37.19	3.64	5.9	38.1	9.4	42.4	4.2	Conn. State Ex. Sta. Rep., 1885, p. 42	3230
3231	Do	12.25	5.30	34.19	9.28	35.48	3.50	6.0	39.0	10.5	40.5	4.0	Ohio Ex. Sta. Rep., 1885, p. 235	3231
3232	Do. *b*	8.61	6.04	35.69	47.31		2.35	6.6	39.0	51.8		2.6	N. J. Ex. Sta. Rep., 1885, p. 172	3232

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ANALYSES OF AMERICAN FEEDING STUFFS—Continued.

		In fresh or air-dry material.						Calculated to water-free substance.					References to publications.	
		Water.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.	Ash.	Protein.	Fiber.	Nitrogen-free extract.	Fat.		
	BY-PRODUCTS AND WASTE MATERIALS—Continued.													
	BY-PRODUCTS FROM LINSEED—continued.	%	%	%	%	%	%	%	%	%	%	%		
3233	Linseed meal, new process *c*	6.01	5.64	38.35	8.64	38.45	2.91	6.0	40.8	9.2	40.9	3.1	Mass. State Ex. Sta. Rep., 1889, p. 137	3233
3234	Do	8.58	6.85	29.72	9.41	42.52	2.92	7.5	32.5	10.3	46.5	3.2	Mass. State Ex. Sta. Rep., 1889, p. 138	3234
	All complete analyses: Maximum	13.35	6.85	38.35	13.99	48.03	4.36	7.5	40.9	15.2	51.7	4.7		
	Minimum	6.01	4.96	27.12	7.58	35.22	1.30	5.5	29.0	8.3	39.5	1.5		
	Average	**10.07**	**5.82**	**33.17**	**9.49**	**38.46**	**2.99**	**6.5**	**36.9**	**10.5**	**42.8**	**3.3**		
	BY-PRODUCTS FROM MISCELLANEOUS SEEDS.													
3235	Palm-nut meal	7.90	3.99	13.53	18.75	41.05	14.78	4.3	14.7	20.4	44.6	16.0	Middletown (Conn.) Ex. Sta. Rep., 1877–'78, p. 38.	3235
3236	Do	6.14	3.72	13.63	23.98	33.80	18.73	4.0	14.5	25.6	36.0	19.9	N. J. Ex. Sta. Rep., 1882, p. 71	3236
3237	Palm-nut meal, imported	10.84	3.51	16.01	21.57	41.66	6.41	3.9	17.9	24.1	46.9	7.2	do	3237
	Average	**8.29**	**3.74**	**14.39**	**21.43**	**38.87**	**13.31**	**4.0**	**15.7**	**23.3**	**42.5**	**14.5**		
3238	Vegetable ivory, sawdust from button factory	18.78	1.08	3.37	7.50	68.57	0.70	1.3	4.1	9.2	84.5	0.9	Conn. State Ex. Sta. Rep., 1880, p. 86	3238
3239	Pea feed	10.09	3.02	14.94	70.78		1.17	3.3	16.5	78.9		1.3	N. J. Ex. Sta. Rep., 1885, p. 166	3239
3240	Bean hulls *	5.07	5.70	7.83	33.09	45.39	1.02	.....	.....	.....	.....	.....	Wis. Ex. Sta. Rep., 1888, p. 141	3240
3241	Cocoa dust from cocoa manufacture, inside and outside parts of cocoa bean, with some foreign matter *c*.	7.10	6.32	14.39	5.38	42.84	23.97	6.8	15.5	5.8	46.1	25.8	Mass. State Ex. Sta. Rep., 1883, p. 88	3241
3242	Date stones, from light-colored dates, sugar-cured.	7.71	1.05	5.16	24.07	53.06	8.95	1.2	5.6	26.1	57.4	9.7	Bussey Inst. Bul. vol. I 1874–'76, p. 375.	3242
3243	Date stones, from dark-colored dates, molasses-cured.	10.83	1.02	5.75	22.06	52.29	8.05	1.2	6.5	24.8	58.6	8.9	do	3243
3244	Peach stones, kernels removed	5.53	0.36	0.58	70.63	22.81	0.09	0.4	0.6	74.9	24.0	0.1	do	3244
3245	Prune stones, kernels removed	10.96	0.40	0.31	48.74	38.87	0.72	0.5	0.4	54.7	43.6	0.8	do	3245
	POMACE AND BAGASSE.													
	Apple pomace:													
3246	From Baldwin apples chiefly	77.21	0.50	0.98	3.90	15.71	1.70	2.2	4.3	17.1	68.9	7.5	Bussey Inst. Bul., 1875, p. 365	3246
3247	Frozen	72.62	0.81	1.65	5.92	17.03	1.97	3.0	6.0	21.6	62.2	7.2	Conn. State Ex. Sta. Rep., 1881, p. 86	3247

3248	From Rhode Island Greening apples. (See No. 1694 for analyses of apples.)	82.50	0.19	1.22	2.90	12.64	0.55	1.1	6.9	16.6	70.2	3.2	Mass. State Ex. Sta. Rep., 1885, p. 90	3248
3249	From Baldwin apples	82.50	0.32	1.35	2.30	12.77	0.76	1.8	7.7	13.1	73.0	4.4	do	3249
3250	From sweet apples	77.87	0.44	1.48	1.95	17.56	0.70	2.0	6.7	8.8	79.3	3.2	Mass. State Ex. Sta. Rep., 1886, p. 42	3250
3251	*No particulars	74.10	0.70	1.40	5.20	16.70	1.90	2.7	5.4	20.1	64.5	7.3	Pa. State Col. Bul. 15, 1886	3251
3252	Do	69.90	0.71	1.58	4.86	21.24	1.71	2.4	5.2	16.1	70.6	5.7	Conn. State Ex. Sta. Rep., 1888, p. 152	3252
	Maximum	82.50	0.81	1.65	5.92	21.24	1.97	3.0	7.7	21.6	79.3	7.5		
	Minimum	69.90	0.19	0.98	1.95	12.64	0.55	1.1	4.3	8.8	62.2	3.2		
	Average	**76.67**	**0.52**	**1.38**	**3.86**	**16.24**	**1.33**	**2.2**	**5.9**	**16.6**	**69.6**	**5.7**		
3253	Bagasse from sorghum, Early Amber sorghum	83.70	0.62	0.65	3.11	11.92		3.8	4.0	19.1	73.1		U. S. Dept. Agr. Rep., 1879, p. 57	3253
3254	Bagasse from sorghum, Honduras sorghum	84.00	0.60	0.62	3.31	11.47		3.7	3.9	20.7	71.7		do	3254
3255	Bagasse from maize, Egyptian sugar corn	88.70	0.55	0.68	2.83	7.24		4.9	8.0	25.0	64.1		do	3255
3256	Bagasse from sugar beets	91.31	0.47	0.94	2.13	5.11	0.04	5.4	10.8	24.5	58.9	0.4	Conn. State Ex. Sta. Rep., 1881, p. 86	3256
3257	Bagasse from sugar beet pulp, diffusion mode	89.68	0.10	1.28	2.45	6.39	0.10	1.0	12.4	23.7	61.9	1.0	Mass. State Ex. Sta. Rep., 1884, p. 112	3257
	MISCELLANEOUS BY-PRODUCTS.													
	Distillery waste:													
3258	Dried sediment deposited from distillery slops.	5.00	11.25	27.35	8.00	36.08	12.32	11.8	28.8	8.4	38.0	13.0	U. S. Dept. Agr. Rep., 1880, p. 169	3258
3259	Same as preceding, except was not completely settled.	6.20	8.50	29.40	3.65	45.90	6.35	9.1	31.3	3.9	48.9	6.8	do	3259
3260	Sediment from the liquid drawn off from the preceding.	87.00	1.32	4.37	0.08	5.73	1.50	10.1	33.6	0.7	44.1	11.5	do	3260
3261	Distillery slops	93.70	0.19	1.85	0.58	2.82	0.86	3.0	29.6	9.3	44.6	13.5	Ky. Ex. Sta. Bul. 4, p. 1	3261
3262	Palmetto root *c*	11.51	3.89	3.36	18.84	61.96	0.44	4.4	3.8	21.3	70.0	0.5	Mass. State Ex. Sta. Rep., 1889, p. 145	3262
3263	Broom-corn waste, stalks *c*	8.70	4.47	6.21	35.79	43.92	0.91	4.9	6.8	39.2	48.1	1.0	Mass. State Ex. Sta. Rep., 1887, p. 101	3263
3264	Refuse meat, cooked and packed in barrels, used for poultry food.	65.44	2.20	35.36	.....	1.34	5.66	4.9	79.3	.....	3.0	12.8	Conn. State Ex. Sta. Rep., 1888, p. 154	3264
3265	Beef scrap	1.33	8.03	57.69	.....	.....	32.95	8.1	58.5	.....	.....	33.4	Me. Ex. Sta. Rep., 1886–'87, p. 68	3265
3266	Pork scrap	0.81	2.24	57.35	.....	.....	39.60	2.2	57.8	.....	.....	40.0	do	3266
3267	Dried blood	6.69	6.64	65.12	.....	5.32	16.23	7.1	69.8	.....	5.7	17.4	do	3267

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